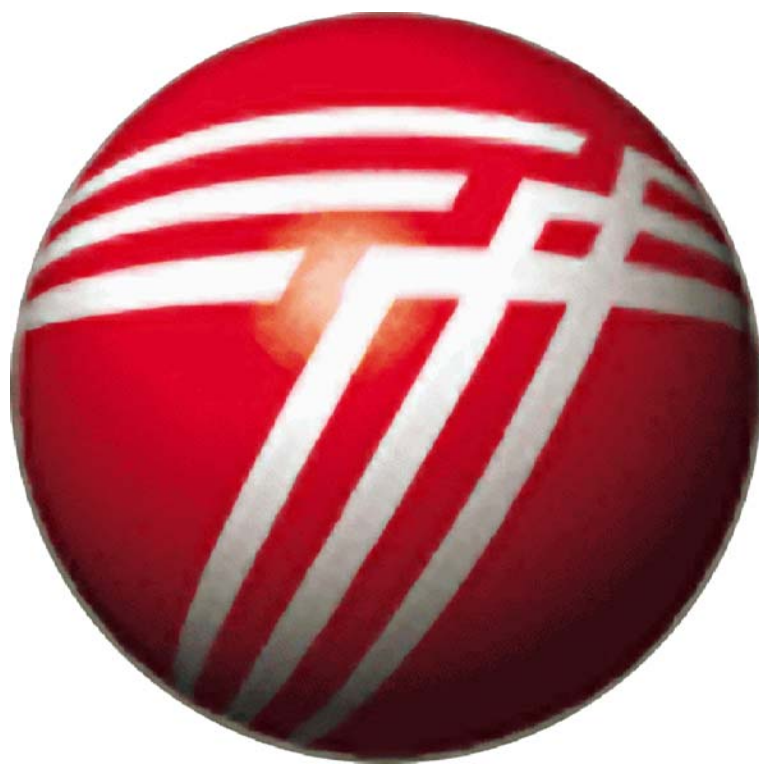


OGDEN-WEBER
APPLIED
TECHNOLOGY
COLLEGE



BDO Satellite Facility
Phase III
Ogden, Utah



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State of Utah—Department of Administrative Services
DIVISION OF FACILITIES CONSTRUCTION
AND MANAGEMENT
4110 State Office Building / Salt Lake City, Utah 84114 / 538-3018

INDEX OF DRAWINGS	
GENERAL	
G-001 Cover Sheet & Index of Drawings	
Hazardous Materials	
n/a	
Civil	
n/a	
Landscape	
n/a	
Structural	
n/a	
Architectural	
A-001 General Information	
A-101 Floor Plan	
A-102 Reflected Ceiling Plan	
A-201 Sections & Elevations	
A-501 Details	
A-601 Schedules	
Interiors	
n/a	
Equipment	
n/a	
Fire Protection	
n/a	
Plumbing	
P-101 Plumbing Floor Plan	
P-201 Plumbing Schedules & Details	
Mechanical	
M-101 Mechanical Floor Plan	
M-201 Mechanical Piping Plan	
M-301 Mechanical Schedules & Details	
Electrical	
E-001 General Notes & Schedules	
E-002 Electrical Details & Power Single Line & Panels	
E-201 Electrical Floor Plan	
E-901 Lighting Floor Plan	
Telecommunications	
n/a	
Resource	
n/a	

APPLICABLE CODES			
	Year		Year
International Building Code	2003	National Electrical Code	2005
International Mechanical Code	2003	Uniform Code for	-
International Plumbing Code	2003	Building Conservation	-
International Fire Code	2003	ADA Accessibility	1998
International Energy Conservation Code	ASHRAE 90.1	Guidelines	

A. Occupancy and Group
Change in Use: Yes ☐ No ☒ Mixed Occupancy: Yes ☐ No ☒
Special Use and Occupancy (e.g. High Rise, Covered Mall):

B. Seismic Design Category: EXISTING Design Wind Speed: EXISTING mph

C. Type of Construction (circle one):
☐ I A ☐ I B ☐ II A ☐ II B ☐ III A ☐ III B ☐ IV HT ☐ V A ☒ V B

D. Fire Resistance Rating: Requirements for the Exterior Walls based on the fire separation distance (in hours).
North: 0 South: 0 East: 0 West: 0

E. Mixed Occupancies: Nonseparated Uses: B

F. Sprinklers:
Required: ☐ Provided: ☒ X Type of Sprinkler System: AUTOMATIC WET PIPE

G. Number of Stories: 1 Building Height: 37

H. Actual Area per Floor (square feet): 28,090

I. Tabular Area: 40,590

J. Area Modifications:
 $A_n = A_s + \left[\frac{A_s I_s}{100} \right] + \left[\frac{A_s I_n}{100} \right] I_s = 100 \left[\frac{F}{P} - 0.25 \right] \frac{W}{30}$
 $40,590 = 9,000 + 4,590 + 27,000 \quad 51 = 100 \left[\frac{F}{P} - 0.25 \right] \frac{30}{30}$

b) Sum of the Ratio Calculations for Mixed Occupancies:
 $\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1 \quad \frac{28,090}{42,750} = 0.66$

c) Total Allowable Area for:
1) One Story: 40,590
2) Two Story: $A_n(2)$
3) Three Story: $A_n(3)$

d) Unlimited Area Building: Yes ☐ No ☒ X Code Section:

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	0		Floors - Ceiling Floors	0	
Interior Bearing Walls	0		Roofs - Ceiling Roofs	0	
Exterior Non-Bearing Walls	0		Exterior Doors and Windows	0	
Structural Frame	0		Shaft Enclosures	-	
Partitions - Permanent	0		Fire Walls	0	
Fire Barriers	0		Fire Partitions	0	
			Smoke Partitions	0	

L. Design Occupant Load: 561
Exit Width Required: 84 Exit Width Provided: 108

M. Minimum Number of Required Plumbing Facilities:
a) Water Closets - Required (m) 7 (f) 7 Provided (m) 8 (f) 8
b) Lavatories - Required (m) 4 (f) 4 Provided (m) 8 (f) 8
c) Bath Tubs or Showers: 0
d) Drinking Fountains: 6 Service Sinks: 1

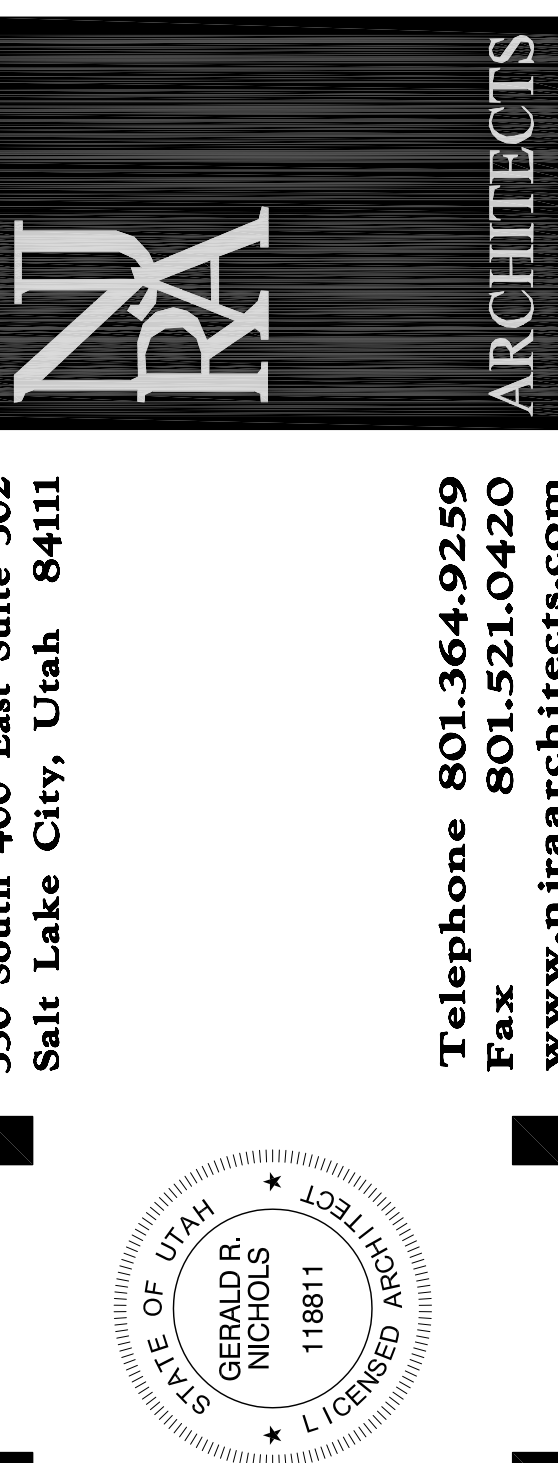
FOOTNOTES:
1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through X, ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.
2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
a) High Rise Requirements.
b) Atriums.
c) Performance Based Criteria.
d) Means of Egress Analysis.
e) Fire Assembly Locator Sheet.
f) Exterior and Interior Accessibility Route.
g) Fire Stopping, Including Tested Design Number.

Ogden-Weber Applied Technology College
BDO PHASE III

ISSUE
JUNE 8 2005 REVIEW SET
JUNE 22 2005 CONSTRUCTION DOCUMENTS

Project #: 05707.00
Cover Sheet &
Index of
Drawings

G-001



ABBREVIATIONS

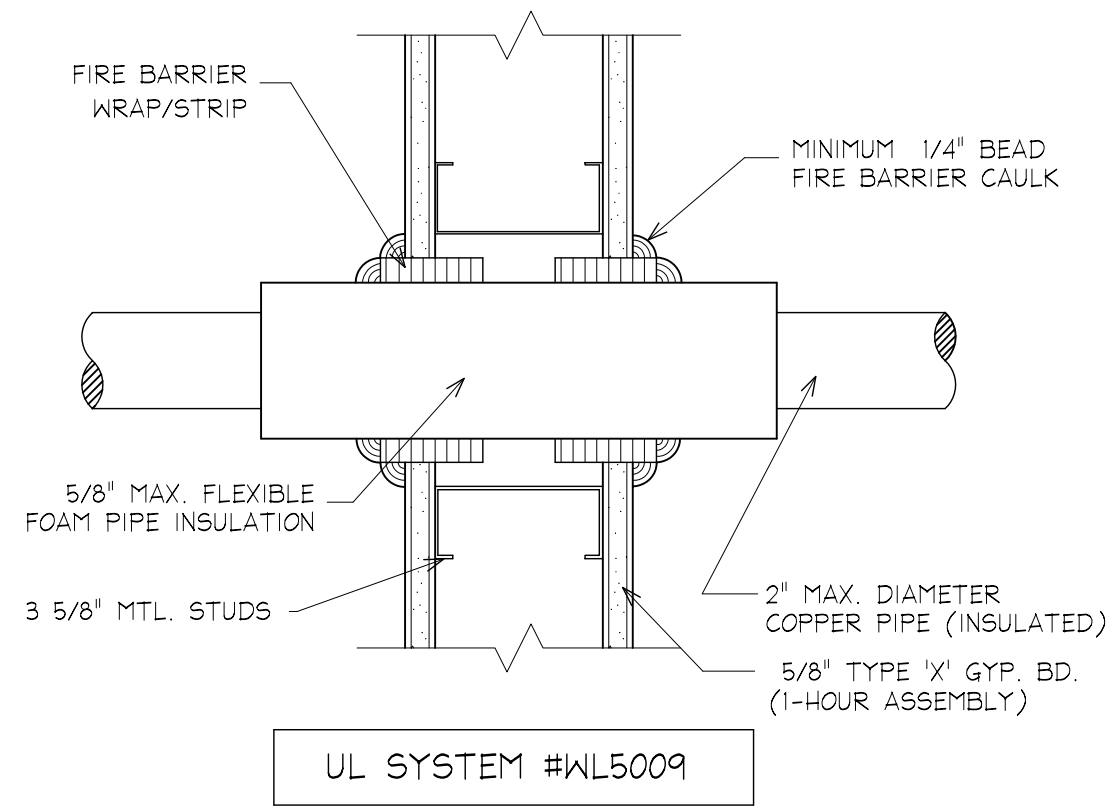
A/C	AIR CONDITIONING	O/O	OUT TO OUT
ACOUS	ACOUSTICAL	O/	OVER
AD	AREA DRAIN	OA	OVERALL
ADFF	ABOVE FINISH FLOOR	OC	ON CENTER
AVE	AVENUE	OD	OUTSIDE DIMENSION/
			DIAMETER
B/M	BENCH MARK	OF/CI	OWNER FURNISHED
BC	BOTTOM OF CURB		CONTRACTOR
BLDG	BUILDING		INSTALLED
BLKG	BLOCKING	OF/CI	OWNER FURNISHED
BOT	BOTTOM		CONTRACTOR
BRG	BEARING		INSTALLED
BS	BOTH SIDES	ORD	OVERFLOW ROOF DRAIN
BSMT	BASEMENT	OZ	ORIGINAL
		OZ	OUNCE
C&G	CURB AND GUTTER	PL	PLATE
CG	CORNER GUARD	PL	PROPERTY LINE
CJ	CONSTRUCTION JOINT	PLAM	PLASTIC LAMINATE
		POS	POST
CMU	CONCRETE MASONRY UNIT	PR	PAIR
CO	CLEAN OUT	PRFAB	PREFABRICATED
CONC	CONCRETE		PREFINISHED
CONT	CONTINUOUS	PTD	PAPER TONEL
			DISPENSER
DEMO	DEMOLITION	PTR	PAPER TONEL
DF	DRINKING FOUNTAIN		RECEPTACLE
DIAG	DIAGONAL	PTS	PNEUMATIC TUBE
DIAM	DIAMETER		STATION
DIFF	DIFFUSER		
DM	DIMENSION	RAD	RADIUS
DS	DOWNSPOUT	RD	ROOF DRAIN
		REF	REFERENCE
E	EAST	REF	REFERENCE
EA	EACH	RENF	REINFORCE (MENT)
ELEC	ELECTRIC	REGD	REQUIRED
ENCL	ELECTRIC(IAL)	REV	REVISION
ENCL	ENCLOSURE	RFG	ROOFING
EP	EDGE OF PAVEMENT	RH	RIGHT HAND
EQPT	EQUIPMENT	RM	ROOM
ES	EACH SIDE	RO	ROUGH OPENING
ENC	ELECTRICAL WATER	ROW	RIGHT OF WAY
	COOLER	RV	ROOF VENT
EXT	EXTERIOR	S	SOUTH/SINK
		SCHED	SCHEDULE
FA	FIRE ALARM	SD	STORY DRAIN OR SOAP
FCO	FLOOR CLEAN OUT		DISPENSER/DISH
FD	FLOOR DRAIN	SIM	SIMILAR
FE	FIRE EXTINGUISHER	SHS	SHEET METAL SCREEN
FEC	FIRE EXTINGUISHER	SPEC	SPECIFICATIONS
		SQ YD	SQUARE YARD
FF	FINISH FLOOR	SQ FT	SQUARE FOOT
FG	FINISH GRADE	SQ IN	SQUARE INCH
FH	FIRE HYDRANT	SS	STAINLESS STEEL
FHC	FIRE HOSE CABINET	ST	STREET
FL	FLOOR	STD	STANDARD
FOC	FACE OF CONCRETE	STOR	STORAGE
FOF	FACE OF FINISH	STRUC	STRUCTURAL
FOM	FACE OF MASONRY	SUSP	SUSPENDED
FS	FACE OF STUD	SYM	SYMMETRICAL
FPR	FIREPROOFING		
FS	FLOOR SINK	T&B	TOP AND BOTTOM
FSP	FIRE SPRINKLER	T&G	TONGUE AND GROOVE
FNC	FABRIC WALL COVERING	TC	TOP OF CURB
		TOC	TOP OF CONCRETE/CURB
GA	GAUGE	TOF	TOP OF FOOTING
GALV	GALVANIZED	TOJ	TOP OF JOIST
GB	GRAB BAR	TOI	TOLERANCE
GC	GENERAL CONTRACTOR	TOPO	TOPOGRAPHIC
GRC	GLASS FIBER REINFORCED	TOS	TOP OF STEEL/SLAB
	CONCRETE	TOW	TOP OF WALL
GLU LAM	GLUE LAMINATED BEAM	TP	TOP OF PAVEMENT
GYP	GYPSON	TRANS	TRANSFORMER
		TRTD	TREATED
HB	HOSE BIB	TS	TUBE STEEL
HDCP	HANDICAP (PED)	TV	TELEVISION
HM	HOLLOW METAL	TYP	TYPICAL
HORIZ	HORIZONTAL		
HP	HIGH POINT OR HORSEPOWER	U/S	UNDER SIDE
HT	HEIGHT	U/C	UNDER CABINET
HVAC	HEATING, VENTILATING, AIR CONDITIONING	UNDWR	UNDERWRITERS
		UNFIN	UNFINISHED
ID	INSIDE DIMENSION/	UNO	UNLESS NOTED OTHERWISE
DIAMETER		VCT	VINYL COMPOSITION
IE	INVERT ELEVATION		TILE
IN	INCH	VEST	VESTIBULE
INT	INTERIOR	VNC	VINYL WALL COVERING
JT	JOINT		
KBD	ARTICULATED KEYBOARD TRAY	W/O	WITHOUT
KO	KNOCKOUT	W/	WITH
KOP	KNOCK OUT PANEL	W/W	WEST/WASTE/WATER
		WB	WALLBOARD
LAB	LABORATORY	WD	WOOD
LAM	LAMINATED	WG	WIRE GLASS
LAV	LAVATORY	WT	WEIGHT
LB	POUND	WKF	WELDED WIRE FABRIC
LH	LEFT HAND		
LYN	LONG LEG HORIZONTAL	YB	YARD BOX
LLV	LONG LEG VERTICAL	YD	YARD DRAIN
LONG	LONGITUDINAL		
LP	LOW POINT	@	AT
		P	PLATE OR PROPERTY LINE
MAX	MAXIMUM	CL	CENTERLINE
MC	MEDICINE CABINET	&	AND
MDL	MEDIUM DENSITY LAMINATE	∠	ANGLE
MECH	MECHANICAL	Ø	DIAMETER
MEZZ	MEZZANINE		
MH	MANHOLE		
MM	MILLIMETER		
MN	MINIMUM		
MIR	MIRROR		
MISC	MISCELLANEOUS		
MOLD	MOLDING		
MO	MASONRY OPENING		
MON	MONUMENT		
MTL	METAL		
N	NORTH		
NC	NURSE CALL		
NEG	NEGATIVE		
NIC	NOT IN CONTRACT		
NOM	NOMINAL		
NMT	NOT TO SCALE		

SYMBOL LEGEND

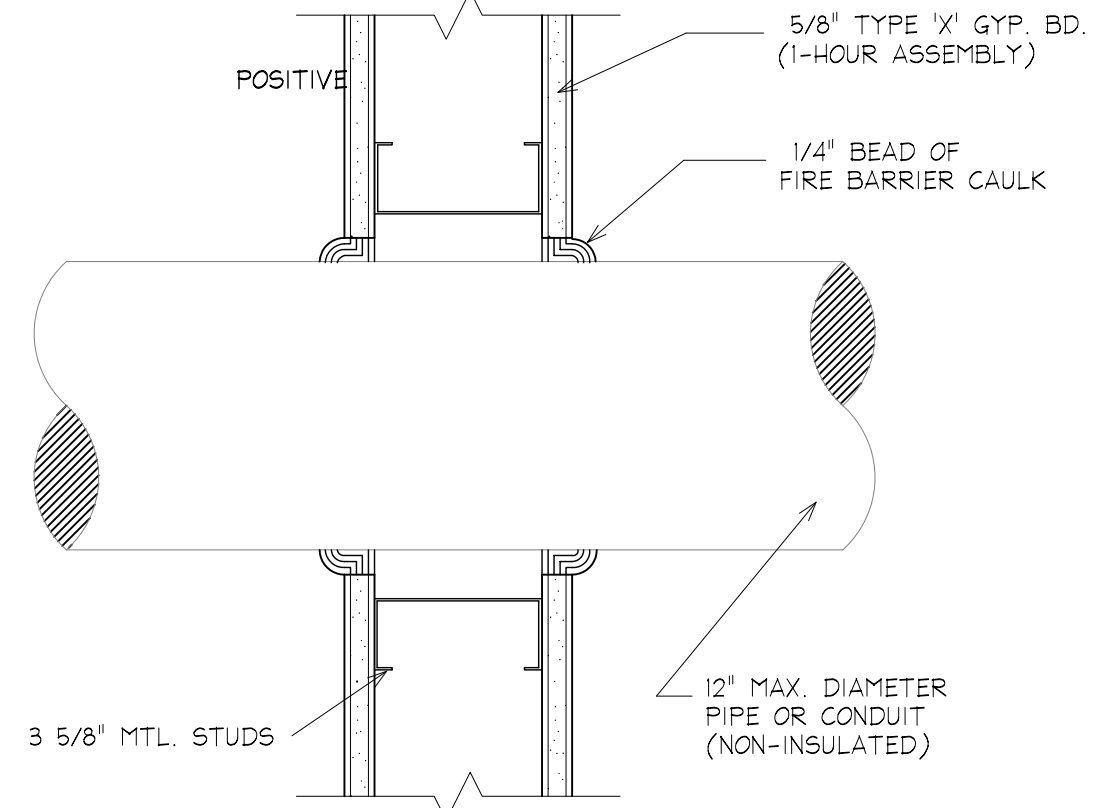
	RIGID INSULATION
	WOOD FRAMING - CONTINUOUS
	WOOD FRAMING - NON-CONTINUOUS
	GYPSON BOARD
	STEEL (SECTION OR STUD PARTITION)
	GRAVEL
	CONCRETE (SECTION)
	STUCCO OR CONCRETE (ELEVATION)
	PLYWOOD
	FINISH WOOD
	BRICK
	EARTH
	ALUMINUM
	BATT INSULATION
	ACOUSTICAL CEILING TILE
	SPOT ELEVATION
	GRID LINE TAG
	KEYED NOTE MARK
	DETAIL REFERENCE MARK
	BUILDING SECTION MARK
	WALL/DETAIL SECTION MARK
	MATCH LINE
	ELEVATION MARK
	PROJECT NORTH DIRECTION
	DOOR TYPES SEE DOOR SCHEDULE
	WINDOW/DOOR TYPES SEE WINDOW SCHEDULE

GENERAL NOTES

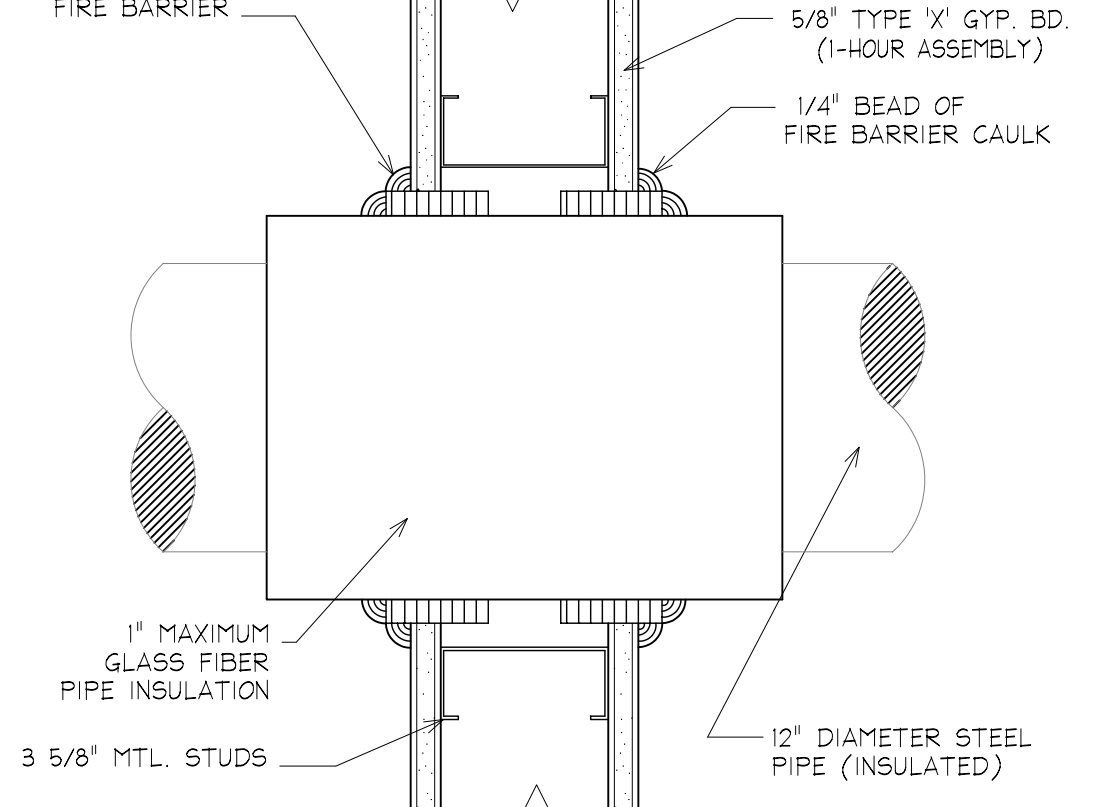
- MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTAL TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE THE INSTALLATION OF MECHANICAL OR ELECTRICAL CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND CONSULTING ENGINEERS' DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR CLARIFICATION. ANY CONSTRUCTION INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
- ALL WORK SHALL COMPLY WITH THE CURRENT ADA ACCESSIBILITY GUIDELINES (AMERICANS WITH DISABILITIES ACT).
- CODES GOVERNING THIS WORK INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: 1997 UNIFORM BUILDING CODE, 1997 NFPA 101, APPLICABLE OSHA REGULATIONS, 1994 NRC, 1994 NFPA 241 STANDARDS FOR SAFEGUARDING CONSTRUCTION, ALTERATIONS, AND DEMOLITION OPERATIONS, AND REQUIREMENTS OF OTHER GOVERNING OFFICIALS. REQUIREMENTS OF CODES AND REGULATIONS SHALL BE CONSIDERED AS MINIMUM. WHERE THE CONTRACT DOCUMENTS EXCEED (WITHOUT VIOLATING) CODE AND REGULATION REQUIREMENTS, CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE. WHERE CODES CONFLICT, THE MORE STRINGENT SHALL APPLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LOCATION AND SIZE OF OPENINGS FOR ALL TRADES AND SHALL COORDINATE ALL CONSTRUCTION AS INDICATED BY THE CONTRACT DOCUMENTS, INCLUDING SHOP DRAWINGS REVIEWED BY THE ARCHITECT.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL COORDINATE WITH THE OWNER ALL MEASURES TO ACCOMPLISH THE WORK WITH THE MINIMUM OF INTERRUPTION TO NORMAL BUILDING PROCEDURES. SYSTEM SHUTDOWNS OF HVAC, PLUMBING, ELECTRICAL, AND NOISY CONSTRUCTION INCLUDING ROT HAMMERS, SAW CUTTING, CONCRETE ANCHORS, ETC. SHALL BE COORDINATED WITH THE OWNER AT LEAST 72 HOURS PRIOR TO COMMENCEMENT.
- ALL DIMENSIONS ARE SHOWN TO FACE OF FINISH OF NEW CONSTRUCTION AND FACE OF FINISH OF EXISTING CONSTRUCTION, UNLESS NOTED OTHERWISE.
- ALL DRAWINGS, THOUGH NOTED TO SCALE ARE FOR ILLUSTRATION ONLY. THE CONTRACTOR SHALL NOT SCALE DRAWINGS.
- WHEN A DETAIL IS IDENTIFIED AS TYPICAL, THE CONTRACTOR IS TO APPLY THIS DETAIL IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE.
- ALL PENETRATIONS INTO SOUND OR FIRE RATED PARTITIONS, FLOORS OR CEILING ASSEMBLIES SHALL BE SEALED WITH APPROVED PERMANENT RESILIENT SEALANT. REFER TO UBC 1997 SEC 701.6.
- PENETRATIONS FOR REQUIREMENTS FOR OPENINGS IN FIRE RATED WALLS. FOR OPENINGS LESS THAN 16 SQUARE INCHES, THE SPACE BETWEEN THE WALL AND ALLOWED PENETRATIONS MUST BE SEALED TO PREVENT THE MOVEMENT OF HOT FLAME OR GASES. ELECTRICAL DEVICES, RECESSED CABINETS, ETC. SHALL BE SEALED, LINED, INSULATED OR OTHERWISE TREATED TO MAINTAIN THE INTEGRITY OF THE ASSEMBLY. SEE PENETRATION DETAILS.
- DRAWINGS HAVE BEEN DETAILED IN COMPLIANCE WITH U.L. LISTING REQUIREMENTS AND ICBO REPORTS FOR THE MATERIALS SPECIFIED. IF AN ALTERNATE OR SUBSTITUTED MATERIAL IS ACCEPTED AS AN EQUAL BY THE GENERAL CONTRACTOR, HE WILL ASSUME THE RESPONSIBILITY FOR WHATEVER CONSTRUCTION MODIFICATION AND/OR ADDITIONAL COSTS ARE REQUIRED.
- ALL TRASH SHALL BE REMOVED DAILY. BUILDING MATERIALS MAY NOT BE STORED IN THE CORRIDORS AT ANY TIME. BLOCKAGE OF ANY REQUIRED EXIT IS PROHIBITED.
- THE CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF WATER AND DRAIN INSTALLATIONS AND OTHER REQUIRED SERVICES WITH EQUIPMENT MANUFACTURERS.
- ABBREVIATIONS THROUGHOUT THE PLAN ARE THOSE IN COMMON USE. THE ARCHITECT SHALL DEFINE THE INTENT OF ANY IN QUESTION.
- INTERIOR FINISHES SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 8 OF THE UNIFORM BUILDING CODE.
- CONTRACTOR SHALL REFER TO THE PROJECT MANUAL FOR A COMPLETE LIST OF GENERAL CONDITIONS, SPECIAL CONDITIONS AND OTHER NOTES.
- INSTALL METAL CORNER BEADS AT ALL EXPOSED WALLBOARD EDGES. INSTALL CASING BEADS WHEREVER WALLBOARD, PLASTER, ETC. ADJUTS A DISSIMILAR FINISH MATERIAL. ALL DOOR SIZES SHOWN ON DOOR SYMBOLS ARE OPENING SIZES. ALLOWANCE FOR THRESHOLDS, ETC. SHOULD BE CONSIDERED. ALL DOORS AND FRAMES SHALL BE REINFORCED WHERE REQUIRED FOR CLOSERS, STOPS AND HARDWARE.
- ALL WOOD TRIMS, SPACER, FILLER, ETC. THROUGHOUT JOB SHALL BE FIRE RETARDANT PRESSURE-TREATED, AS PER 1997 U.B.C. CONTRACTOR SHALL LOCATE BACKING PLATES BEHIND ALL WALL MOUNTED EQUIPMENT, CASEWORK, WALL MOUNTED DOOR STOPS AND ACCESSORIES TO ENSURE POSITIVE ATTACHMENT TO THE STRUCTURE. SEE RELEVANT DETAILS.
- ELEVATIONS ARE WITH RESPECT TO FINISH FLOOR ELEVATION. VERIFY FINISH FLOOR HEIGHT.



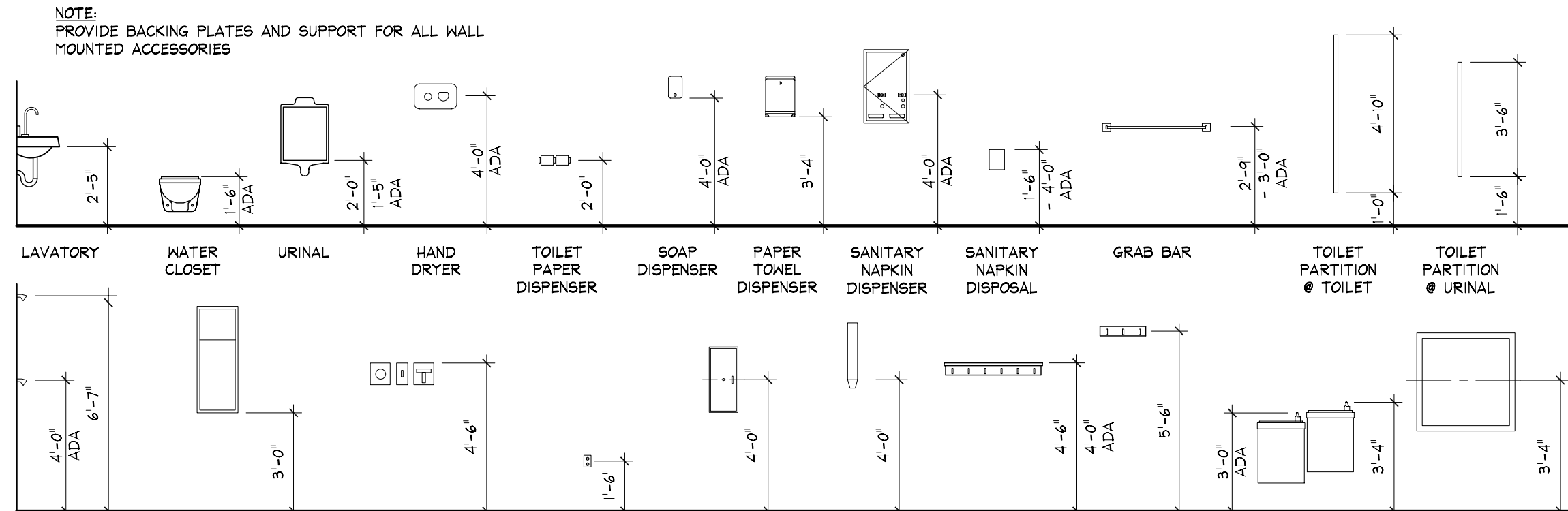
D2 FIRE-STOP DETAIL (AT GYP. BD. WALL)
NO SCALE - TYPICAL



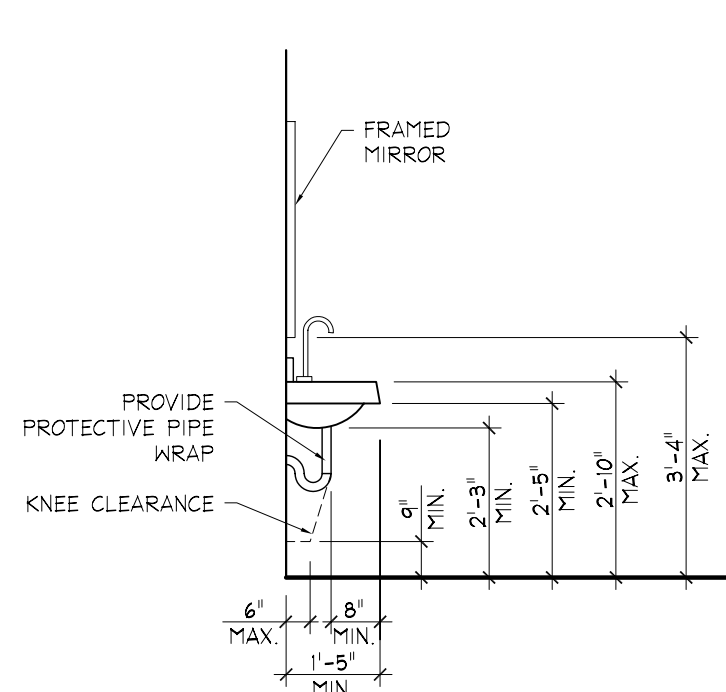
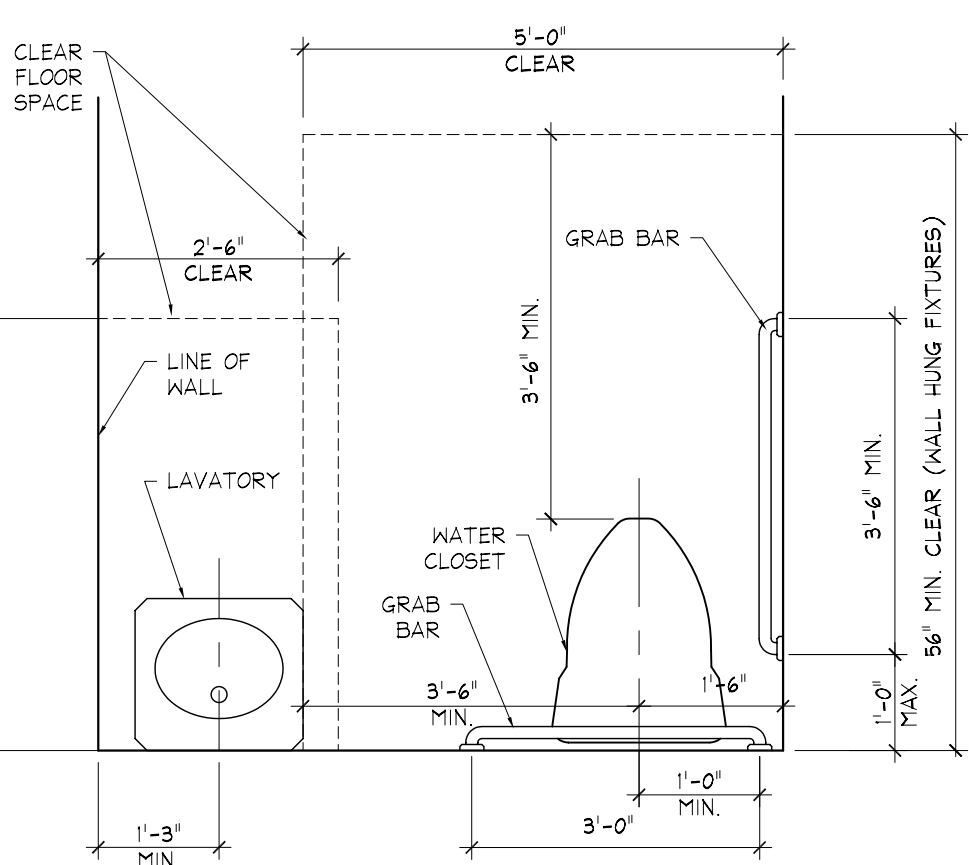
C2 FIRE-STOP DETAIL (@ GYP. BD. WALL)
NO SCALE - TYPICAL



B2 FIRE-STOP DETAIL (AT GYP. BD. WALL)
NO SCALE - TYPICAL



A1 TYPICAL MOUNTING HEIGHTS
NOT TO SCALE



	TYPE 1	EXISTING PRE-FABRICATED METAL BUILDING W/ NEW 3/8" GYPSON BOARD OVER 3/8" METAL STUD FRAMING.
	TYPE 2	5/8" GYP. BOARD (TYPE "X" WHERE REQUIRED) OVER 3/8" OR 6" METAL STUD FRAMING.
	TYPE 3	ADD 5/8" GYP. BOARD OVER EXISTING 3/8" METAL STUD FRAMING.

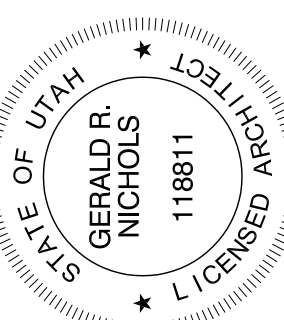
A5 WALL TYPES
NOT TO SCALE

	FUTURE WALL
	EXISTING WALL
	ONE-HOUR FIRE RESISTIVE WALL

A6 GENERAL WALL TYPES
NOT TO SCALE



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BDO PHASE III

General Information Sheet

A-001

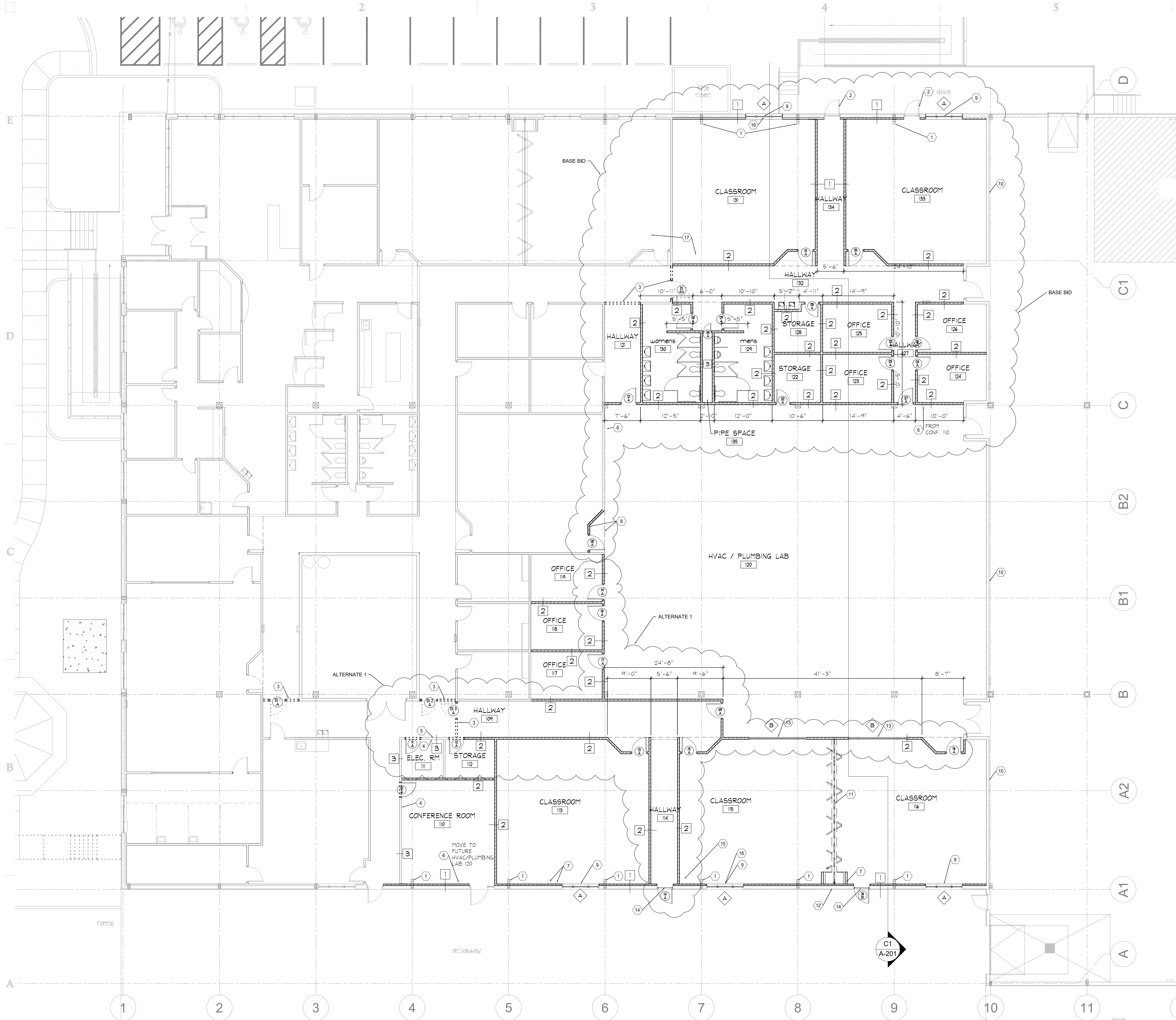
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Business Depot Ogden - Building 10A Ogden, Utah 84404

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JUNE 22 2005 CONSTRUCTION DOCUMENTS

Project #: 05707.00

J:\700 Education\05707.00 OWATC - Build-Out Completion\CAD\DWg\A-101.dwg, 6/28/2005 3:02:54 PM, ccracraft



KEYED NOTES

1. FURR AROUND EXISTING COLUMN TO 6" ABOVE CEILING.
2. EXISTING DOOR TO REMAIN.
3. EXISTING WALL AND DOOR TO BE REMOVED. PATCH AND REPAIR EXISTING WALL TO REMAIN AS REQUIRED.
4. APPLY ONE LAYER GYPSUM BOARD ON EXISTING STUD WALL.
5. CUT OPENING AND FRAME IN NEW DOOR.
6. EXISTING BRACKET MOUNTED FIRE EXTINGUISHER RELOCATE AS NOTED.
7. EXISTING PIPE AND CONDUIT.
8. REMOVE A PORTION OF EXISTING WALL FOR NEW CLASSROOM ENTRANCE.
9. CUT OPENING FOR NEW WINDOW IN EXISTING EXTERIOR WALL. MATCH EXISTING WINDOW INSTALLATION. GLASS, FRAME, SILL, AND OTHER DETAILS.
10. EXISTING FIRE RATED WALLS. ANY DAMAGE OR PENETRATIONS ARE TO BE PATCHED AND SEALED. SEE FIRE STOP DETAILS SHEET A-001.
11. FOLDING PARTITION WALL. SEE DETAILS E1E3A-501.
12. CUT OPENING FOR NEW DOOR IN EXISTING EXTERIOR WALL. MATCH EXISTING DOOR INSTALLATION. FRAME, AND OTHER DETAILS.
13. WINDOWS IN HOLLOW METAL FRAMES. SEE DETAIL C5A-501.
14. CUT NEW DOOR OPENING INTO EXISTING EXTERIOR WALL. SEE DETAIL C4A-501.
15. REMOVE EXISTING 1/2" CABLE CROSS BRACING THIS BAY AND REINSTALL IN NEXT BAY TO THE NORTH. MATCH EXISTING DETAIL EXACTLY AND PROVIDE EQUAL TENSION IN CABLES.
16. LOCATE WINDOW FOR MINIMAL INTERFERENCE WITH CROSS BRACING. VERIFY LOCATION WITH ARCHITECT.
17. SAW CUT EXISTING FLOOR SLAB FOR NEW DRAIN AS REQUIRED. PATCH AND REPAIR SLAB AS REQUIRED TO MATCH ADJACENT EXISTING CONDITION. SEE PLUMBING DRAWINGS FOR WORK REQUIRED.

GENERAL NOTES

1. PROVIDE SOUND INSULATION BLANKETS IN WALLS INDICATED ON SHEET A-102.
2. SEE DETAIL A5A-501 FOR WALL TYPES.

BASE BID

ARCHITECTURAL - ALL WORK DEFINED ON THE DRAWINGS WEST OF GRID B2 TO THE EXTERIOR OF THE BUILDING AND BETWEEN THE GRIDS 5-10. IT ALSO INCLUDES WALL AND DOOR INSTALLATION AT DOOR 120A.

MECHANICAL - ALL WORK DESCRIBED ON THE DRAWINGS. MECHANICAL WORK EAST OF GRID B2 WHERE THERE ARE NO CEILINGS SHALL NOT INCLUDE DUCTWORK OR DIFFUSERS DOWNSTREAM OF THE VAV BOXES. ALL CONTROLS AND PIPING SHALL ALSO BE INSTALLED SO THAT THE VAV BOXES ARE FULLY FUNCTIONAL.

ELECTRICAL - ALL WORK DEFINED ON THE DRAWINGS WEST OF GRID B2 TO THE EXTERIOR OF THE BUILDING AND BETWEEN THE GRIDS 5-10 INCLUDING WORK SHOWN IN THE MAIN ELECTRICAL CLOSET ON SHEET E-201 AND WALL AND DOOR INSTALLATION AT DOOR 120A.

ALTERNATE #1

ARCHITECTURAL - ALL WORK DEFINED ON THE DRAWINGS BY THE CLOUDED AREA INDICATED TO BE ALTERNATE #1. INCLUDED WILL BE TO COMPLETE HALLWAY 109 AND HALLWAY 114, WALL SEPARATING CLASSROOMS 115 AND 116 FROM HVAC LAB 120 AND WORK REQUIRED ALONG THE SOUTH WALL OF HVAC 120 WITH THE REQUIRED WALLS, DOORS, CEILING, SOFFITS, FLOOR FINISH AND OTHER REQUIREMENTS INDICATED. THE END OF HALLWAY 109 OCCURS JUST NORTH OF GRID 7.

MECHANICAL - MECHANICAL WORK IS TO BE INCLUDED IN THE BASE BID. MECHANICAL WORK EAST OF GRID B WHERE THERE ARE NO CEILINGS SHALL NOT INCLUDE DUCTWORK OR DIFFUSERS DOWNSTREAM OF THE VAV BOXES. ALL CONTROLS AND PIPING SHALL ALSO BE INSTALLED SO THAT THE VAV BOXES ARE FULLY FUNCTIONAL.

ELECTRICAL - ALL WORK DEFINED ON THE DRAWINGS BY THE CLOUDED AREA INDICATED TO BE ALTERNATE #1 ON SHEET A-101. INCLUDED WILL BE TO COMPLETE HALLWAY 109 AND HALLWAY 114, WALL SEPARATING CLASSROOMS 115 AND 116 FROM HVAC LAB 120 AND WORK REQUIRED ALONG THE SOUTH WALL OF HVAC 120 WITH THE REQUIRED WALLS, CEILING AND SOFFITS, AND OTHER REQUIREMENTS INDICATED. THE END OF HALLWAY 109 OCCURS JUST NORTH OF GRID 7.

ALTERNATE #2

ARCHITECTURAL - THE REMAINING WORK REQUIRED WHICH WAS NOT INCLUDED IN ALTERNATE #1 FOR OFFICES 117-119, ROOMS 110-112A AND CLASSROOMS 113, 115 AND 116.

MECHANICAL - MECHANICAL WORK IS TO BE INCLUDED IN THE BASE BID. MECHANICAL WORK IN THE ALTERNATE #1 AREA WHERE THERE ARE NO CEILINGS SHALL NOT INCLUDE DUCTWORK OR DIFFUSERS DOWNSTREAM OF THE VAV BOXES. ALL CONTROLS AND PIPING SHALL ALSO BE INSTALLED SO THAT THE VAV BOXES ARE FULLY FUNCTIONAL.

ELECTRICAL - THE REMAINING WORK REQUIRED WHICH WAS NOT INCLUDED IN ALTERNATE #1 FOR OFFICES 117-119, ROOMS 110-112 AND CLASSROOMS 113, 115 AND 116.

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DFOM#: 03261240
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JUNE 6 2005	REVIEW SET
JUNE 22 2005	CONSTRUCTION DOCUMENTS

Project #: 05707.00

Floor Plan

A-101



KEYED NOTES

1. 2' x 4' LAY-IN ACOUSTICAL PANEL CEILING. SEE DETAILS A3, A3/A-501.
2. SUSPENDED GYPSUM BOARD CEILING SOFFIT. SEE DETAILS A4, B3/A-501.
3. GYPSUM BOARD HEADER AT CEILING TRANSITION.
4. NO CEILING IN THIS AREA.

GENERAL NOTES

1. INSTALL LAY-IN ACOUSTICAL PANEL CEILING PER DETAILS A3, A3/A-501.
2. INSTALL GYPSUM BOARD CEILING SOFFIT AS PER DETAILS A4, B3/A-501.

LEGEND

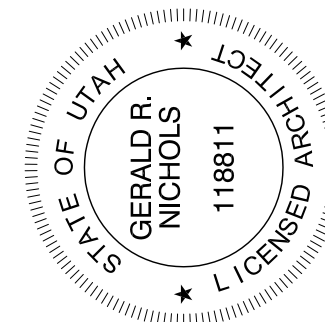
- | | | | |
|--|---|--|----------------------------|
| | 2' x 4' LAY-IN ACOUSTICAL PANEL CEILING. SEE DETAILS A3, A3/A-501. UNLESS NOTED OTHERWISE, CEILING SHALL BE A.P.C. #1. SEE PROJECT MANUAL FOR APC #1. | | EXHAUST GRILLE |
| | SUSPENDED GYPSUM BOARD CEILING OR SOFFIT. SEE DETAILS A4, B3/A-501. | | SUPPLY AIR DIFFUSER |
| | PROVIDE SOUND BATT INSULATION IN THESE WALLS. (NOT TO SCALE) | | RETURN AIR GRILLE |
| | | | CEILING HEIGHT FROM FLOOR |
| | | | FLUORESCENT LIGHT FIXTURE |
| | | | WALL MOUNTED LIGHT FIXTURE |
| | | | RECESSED LIGHT FIXTURE |

FOR ALTERNATES SEE SHEET A-101



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Ogden-Weber Applied Technology College
BDO PHASE III

DFCM#: 03261240

Business Depot Ogden - Building 10A Ogden, Utah 84404

ISSUE

JUNE 6 2005 REVIEW SET
JUNE 22 2005 CONSTRUCTION DOCUMENTS

Project #: 05707.00

Reflected Ceiling
Plan

A-102

□

E

D

C

B

A

□

1

2

3

4

5

6

□

□

E

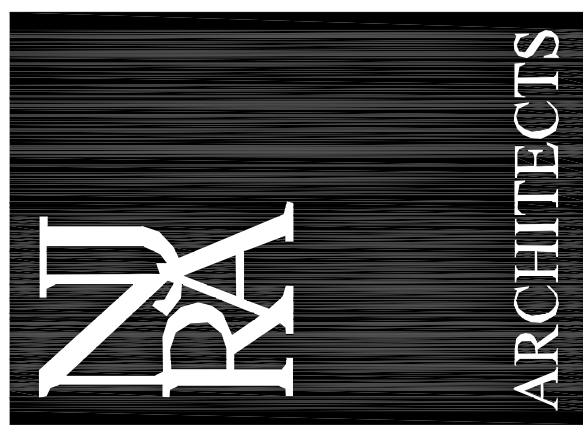
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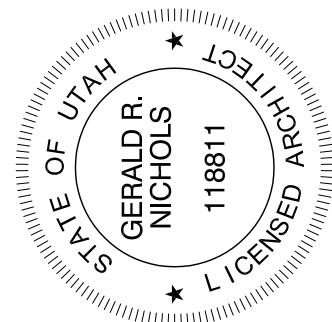
A

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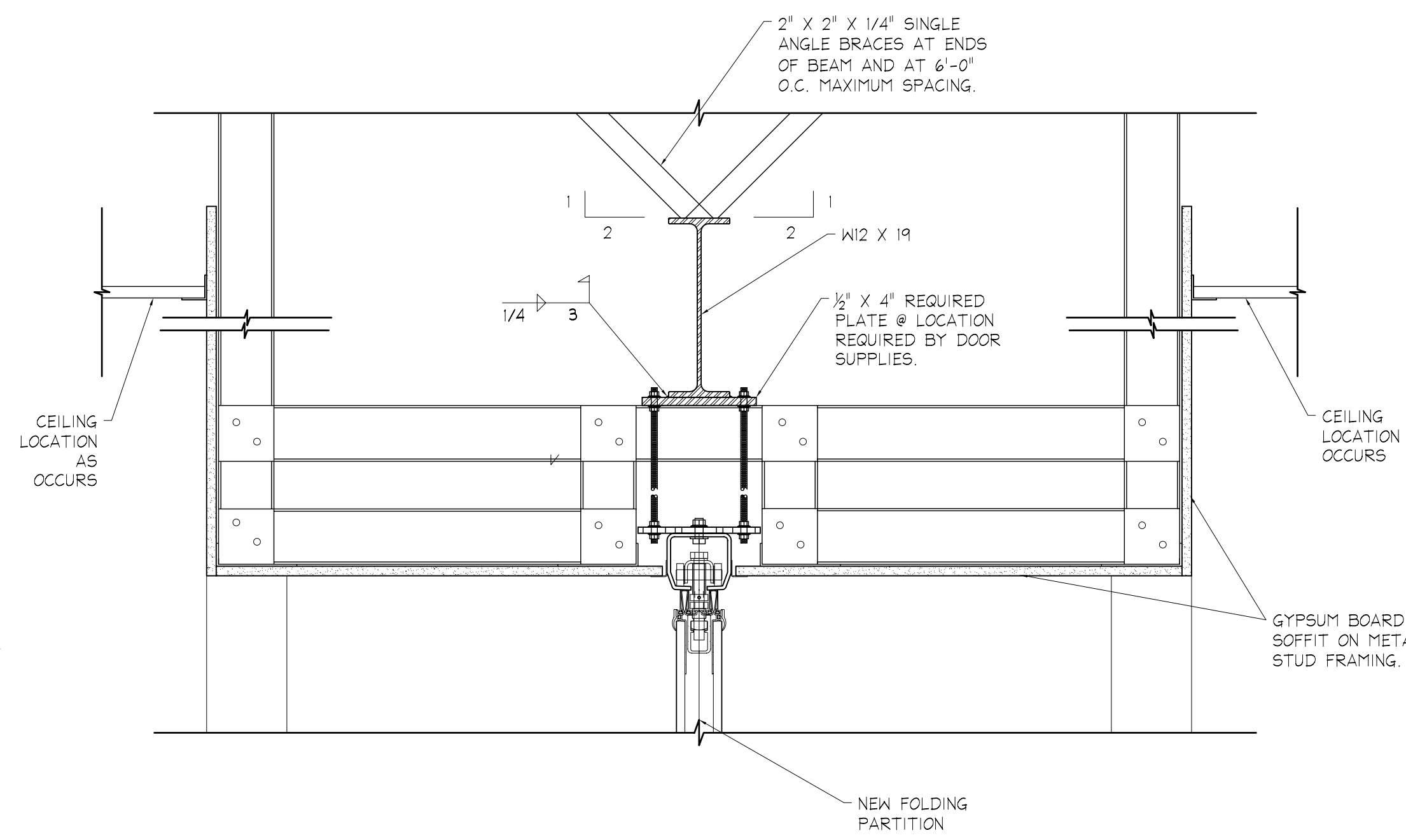
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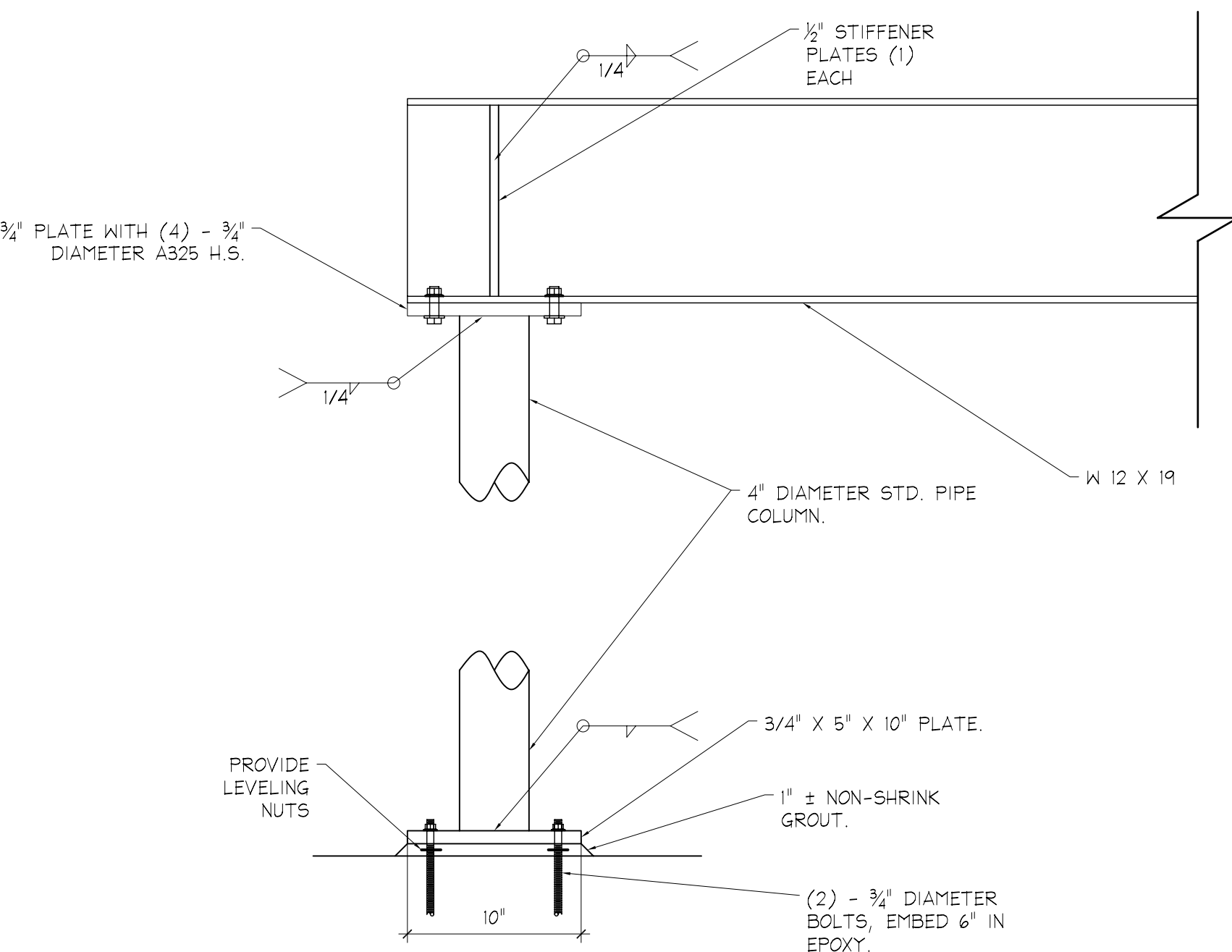
E1 FOLDING PARTITION WALL

1-1/2" = 1'-0"



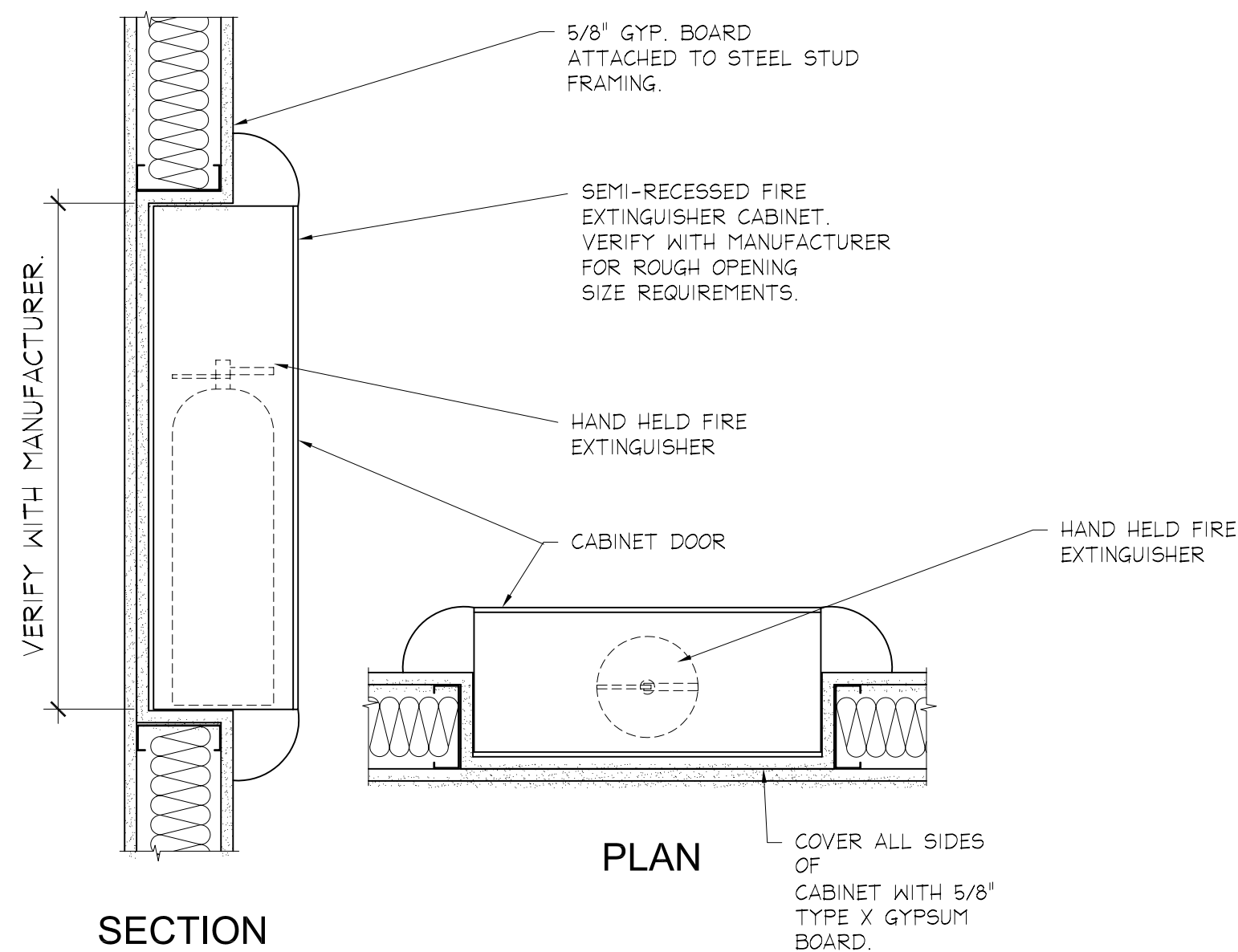
E3 FOLDING PARTITION WALL SUPPORT

1-1/2" = 1'-0"



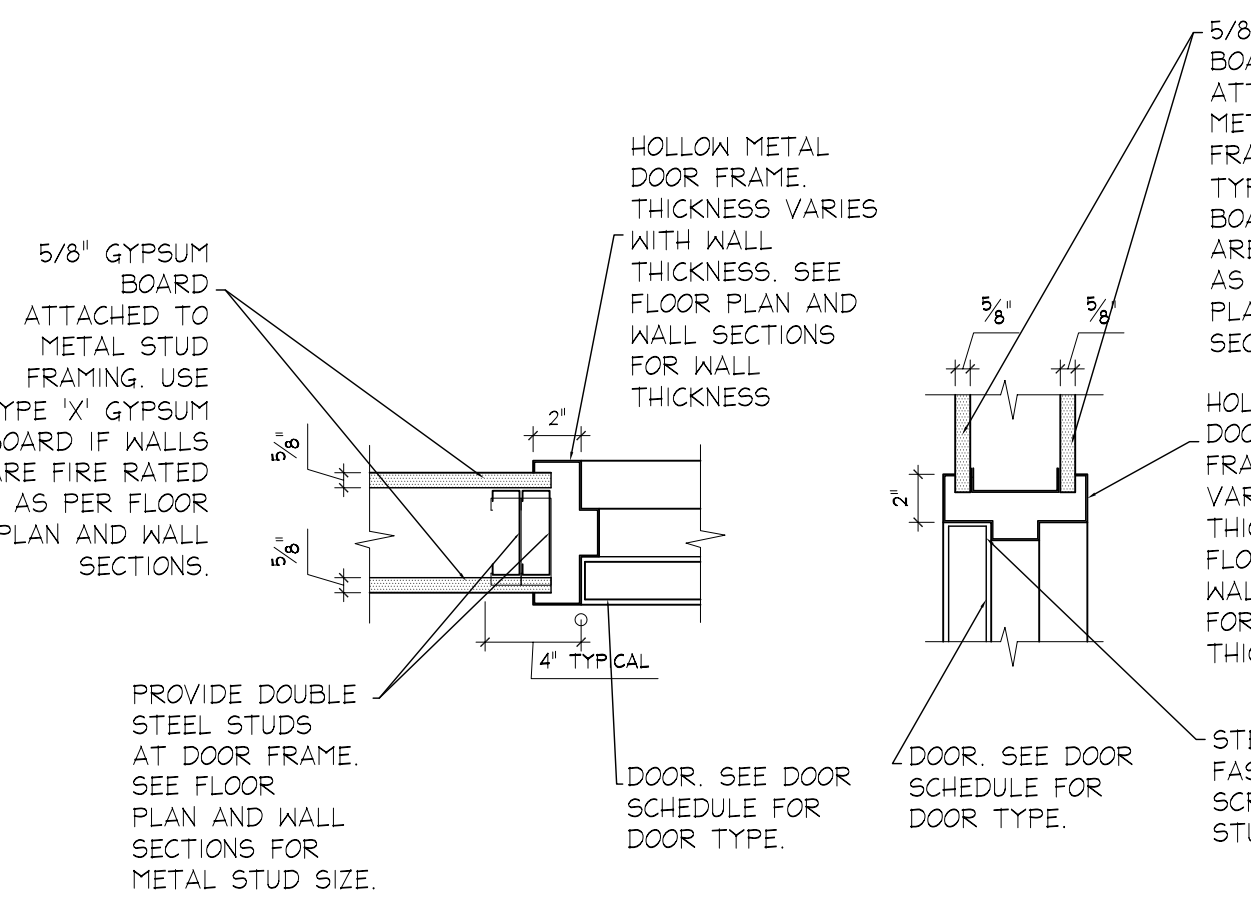
C1 Fire Extinguisher

1-1/2" = 1'-0"



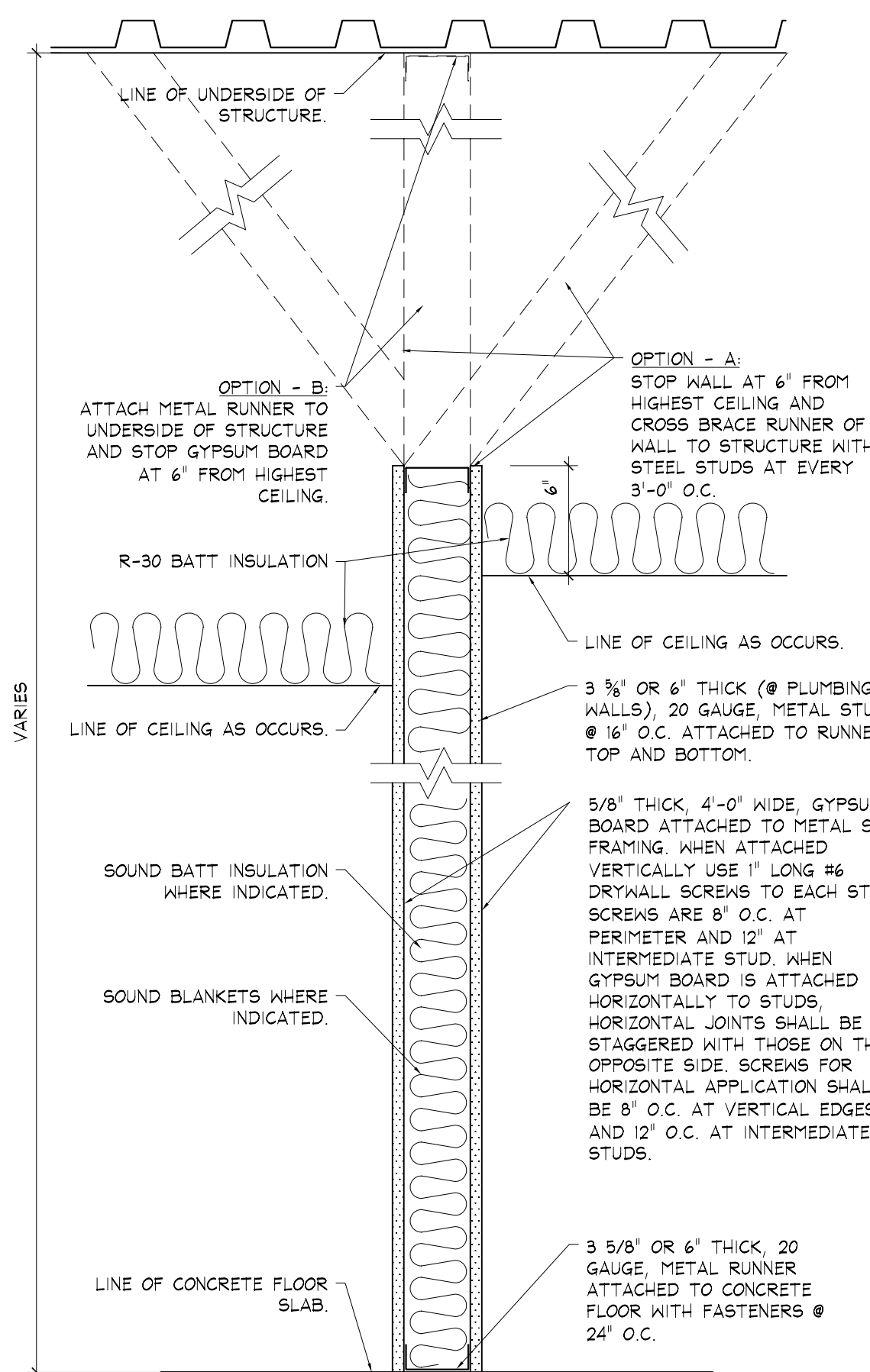
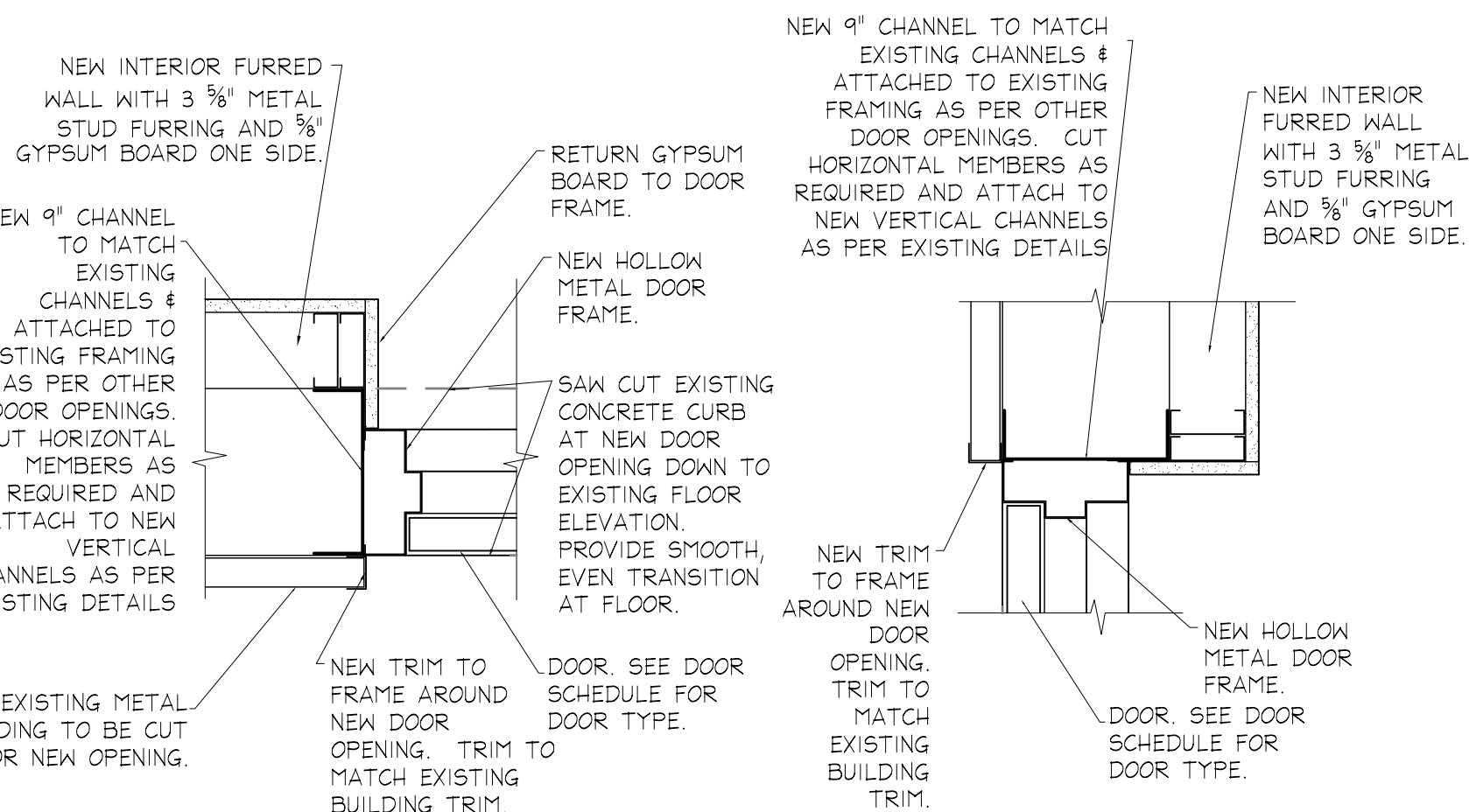
C3 Door Frame

1 1/2" = 1'-0"



C4 Door Frame

1 1/2" = 1'-0"

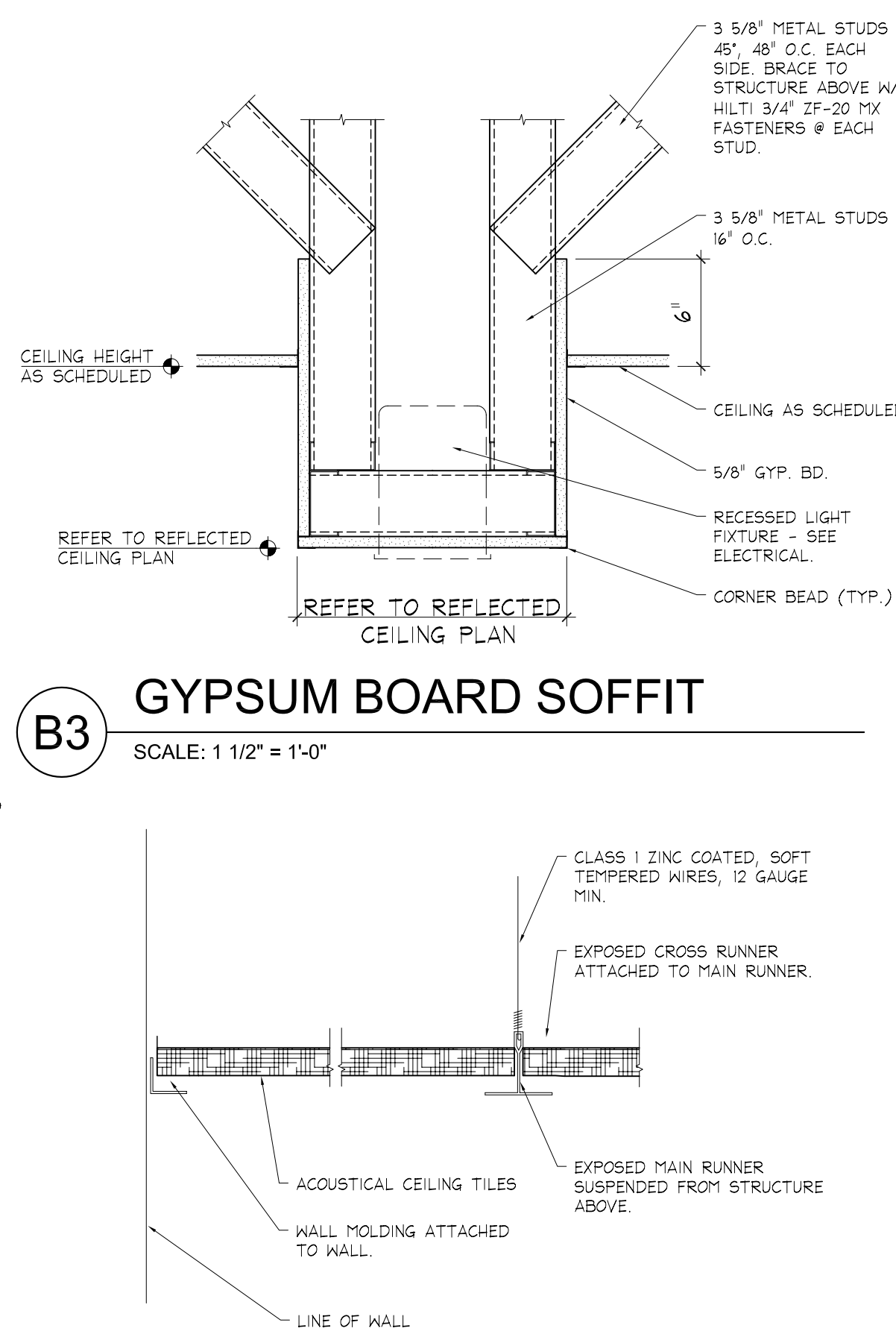


A2 NON RATED WALL SECTION

SCALE: 1 1/2" = 1'-0"

B3 GYPSUM BOARD SOFFIT

SCALE: 1 1/2" = 1'-0"

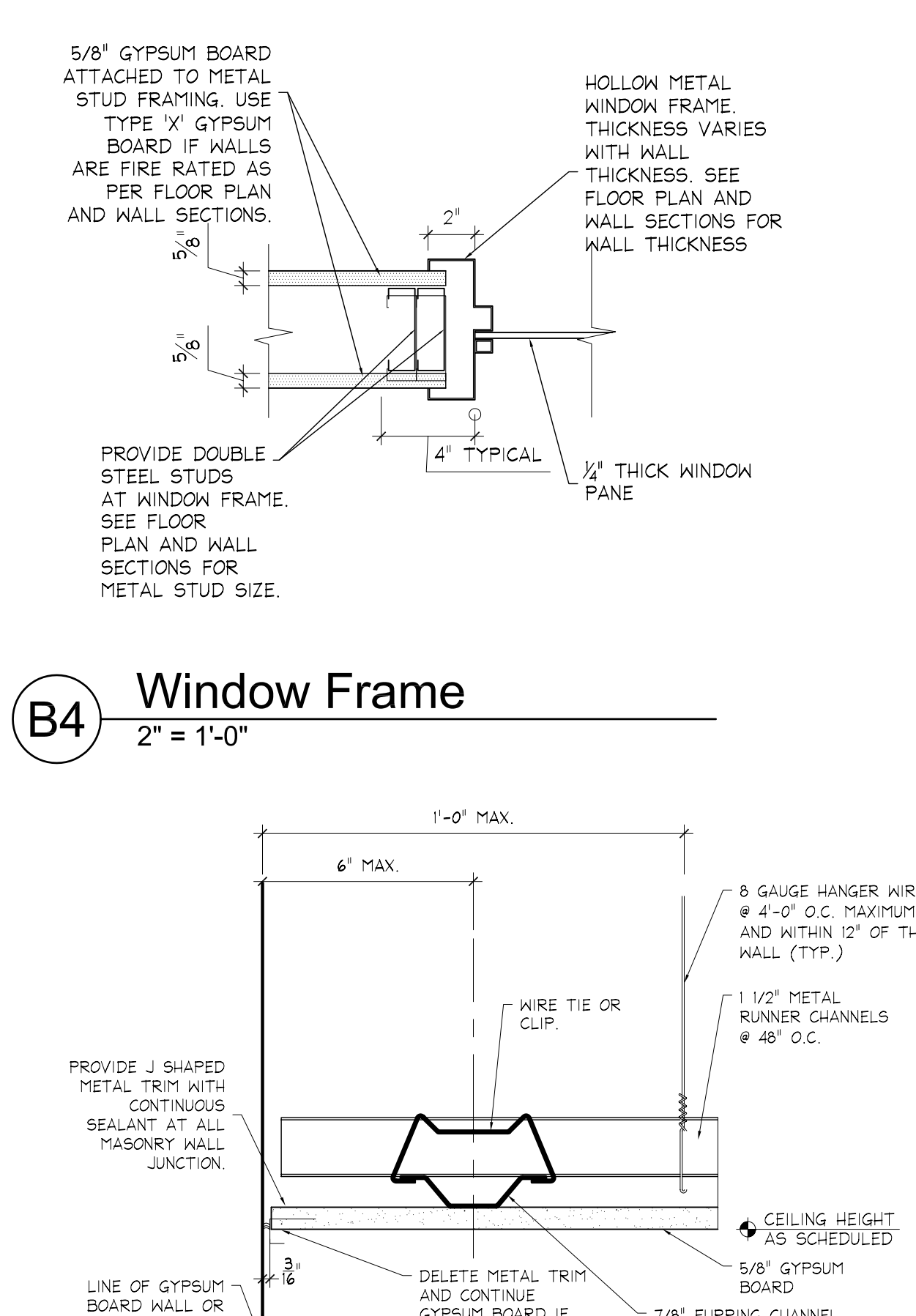


A3 ACOUSTICAL PANEL CEILING

3" = 1'-0"

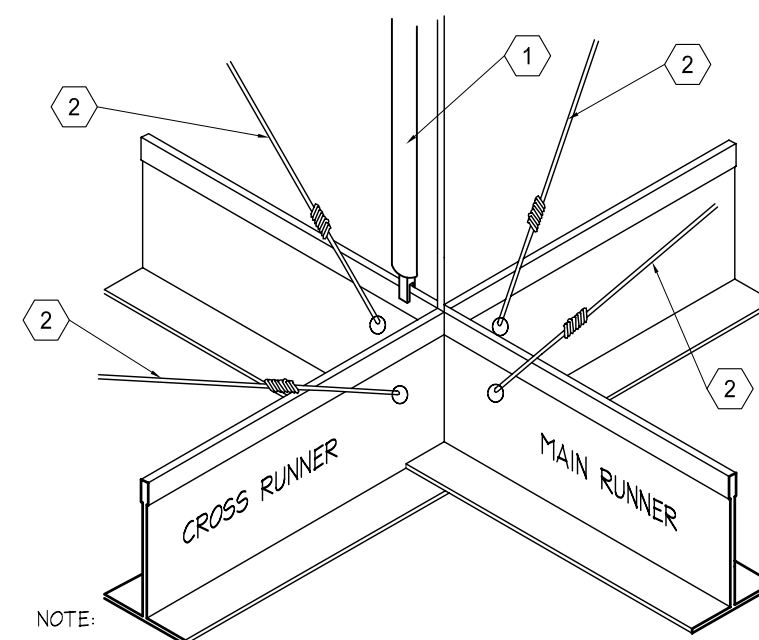
B4 Window Frame

2" = 1'-0"



A4 GYPSUM BOARD CEILING

3" = 1'-0"



A5 ACOUSTICAL GRID SEISMIC DETAIL

Not To Scale

NOTE:
1. CEILING GRIDS IN ROOMS OR AREAS GREATER THAN 1,000 SQ. FT. SHALL HAVE A RIGID HORIZONTAL RESTRAINT FROM CEILING TO STRUCTURE ABOVE AT EVERY 144 SQ. FT.
2. ALL PLATED WIRES SHALL BE AT 45° ANGLE, 12 GAUGE AND GALVANIZED.
3. WHEN CEILING AREA EXCEEDS 2,500 SQ. FT. PROVIDE SEISMIC SEPARATION JOINT APPROVED BY CEILING GRID MANUFACTURER AND ARCHITECT.

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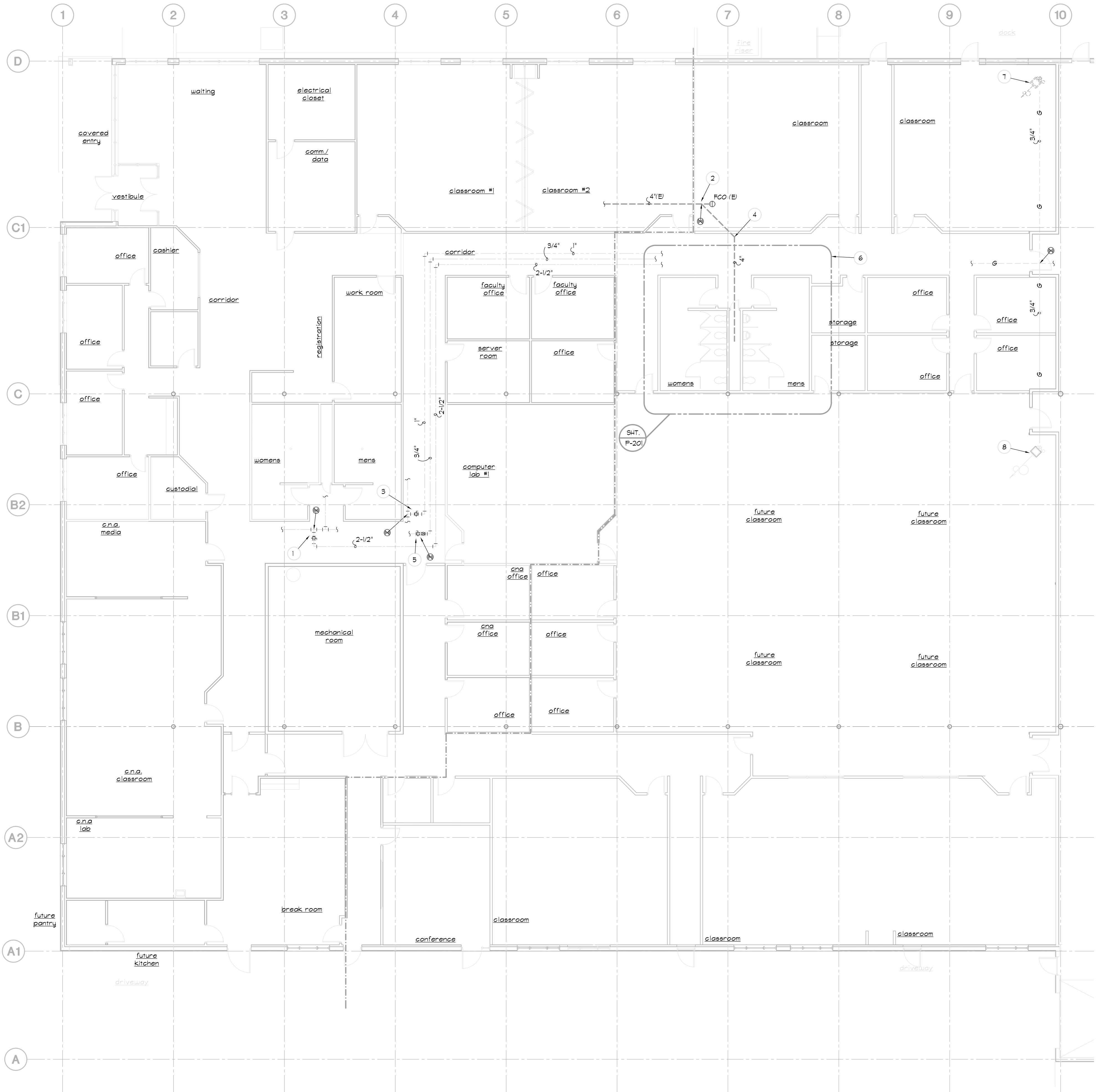
Details

A-501

[illegible][illegible]

LEGEND	DESCRIPTION	MANUFACTURER	STYLE	MODEL #	COLOR	REMARKS
F1- FLOOR FINISH	VINYL COMPOSITION TILE	MANNINGTON COMMERCIAL	BASICS		TIBURON	1. MATCH EXISTING
F2- FLOOR FINISH	VINYL COMPOSITION TILE	MANNINGTON COMMERCIAL			415 - ECRU MULTIFLEC	FIELD, MATCH EXISTING
F3- FLOOR FINISH	VINYL COMPOSITION TILE	MANNINGTON COMMERCIAL			239 - BROWN EARTH	ACCENT, MATCH EXISTING
F4- FLOOR FINISH	VINYL COMPOSITION TILE	MANNINGTON COMMERCIAL			295 - DEEP FERN	ACCENT, MATCH EXISTING
F5- FLOOR FINISH	VINYL COMPOSITION TILE	MANNINGTON COMMERCIAL			101 - NIGHT BLACK	ACCENT, MATCH EXISTING
F6- FLOOR FINISH	SEALED CONCRETE					
F7- FLOOR FINISH	CERAMIC TILE					
B1- WALL BASE	RUBBER BASE - 4"	FLEXCO			WF - 030	1. MATCH EXISTING
B2- WALL BASE	CERAMIC TILE					
W1- WALL FINISH	PAINT	PRATT & LAMBERT			2314 SEED PEARL	MATCH EXISTING
W1- WALL FINISH	CERAMIC TILE WAINSCOT					





Keyed Reference Notes

- 1 FIELD LOCATE EXISTING 2-1/2" DOMESTIC COLD WATER MAIN ABOVE CEILING IN CORRIDOR. INSTALL 2-1/2" TEE AND VALVE IN LINE AND EXTEND NEW 2-1/2" COLD WATER SERVICE TO NEW REST ROOM GROUP. FIELD VERIFY EXACT LOCATION.
- 2 EXISTING 4" WASTE LINE AND FLOOR CLEAN OUT. FIELD VERIFY EXACT LOCATION.
- 3 FIELD LOCATE EXISTING 1" DOMESTIC HOT WATER MAIN ABOVE CEILING IN CORRIDOR. INSTALL 1" TEE AND VALVE IN LINE AND EXTEND NEW 1" HOT WATER SERVICE TO NEW REST ROOM GROUP. FIELD VERIFY EXACT LOCATION.
- 4 EXTEND NEW 4" WASTE LINE FROM NEW REST ROOM GROUP AND CONNECT TO EXISTING 4" SANITARY SEWER LINE UNDER FLOOR. SAW OUT FLOOR SLAB AS REQUIRED. FIELD VERIFY EXACT LOCATION AND INVERT ELEVATION.
- 5 FIELD LOCATE EXISTING 1" DOMESTIC HOT WATER REGULATION VALVE ABOVE CEILING IN CORRIDOR. CONNECT NEW 3/4" REGULATION LINE AT VALVE AND INSTALL FLOW SETTER (GROUT SETTER OR EQUAL) AND EXTEND NEW 3/4" HOT WATER REGULATION SERVICE TO NEW REST ROOM GROUP. FIELD VERIFY EXACT LOCATION.
- 6 SEE 1/4" SCALE REST ROOM PLUMBING FLOOR PLAN, SHEET P-201, FOR CONTINUATION.
- 7 EXISTING UNIT HEATER TO BE RELOCATED. REMOVE EXISTING FUEL GAS PIPING BACK TO MAIN LINE IN CORRIDOR AREA.
- 8 NEW LOCATION FOR EXISTING UNIT HEATER. EXTEND FUEL GAS PIPING FROM MAIN IN CORRIDOR AREA TO NEW UNIT LOCATION. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

General Plumbing Notes

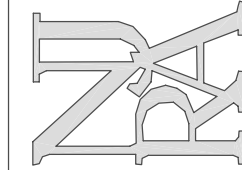
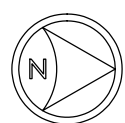
- 1 - PLUMBING CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHER TRADES.
- 2 - INSTALLATION SHALL BE IN CONFORMANCE WITH THE IPC 2003 EDITION, IBC 2003 EDITION, IFGC 2003 EDITION AND THE NEC 2004 EDITION. ALL AS ADOPTED AND AMENDED BY THE STATE OF UTAH AND THE LOCAL JURISDICTION.
- 3 - THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP AND REMOVAL OF WORK RELATED DEBRIS.
- 4 - ARRANGE AND SCHEDULE INSPECTIONS IN A TIMELY MANNER WITH THE CONSTRUCTION SCHEDULE.
- 5 - REFER TO THE ARCHITECTURAL DIMENSIONED PLANS FOR THE EXACT LOCATION OF PLUMBING FIXTURES AND EQUIPMENT.
- 6 - PLUMBING EQUIPMENT AND PIPING SHALL BE SEISMICALLY BRACED WHERE REQUIRED IN CONFORMANCE WITH THE IBC, 2003 EDITION.

Plumbing Symbols and Abbreviations

—	DOMESTIC COLD WATER	A.F.F. = ABOVE FINISH FLOOR
—	DOMESTIC HOT WATER	CA = COMPRESSED AIR
—	HOT WATER RECIRC.	COTG = CLEAN OUT TO GRADE
—	WASTE (SANITARY SEWER)	CW = DOMESTIC COLD WATER
—	VENT (SEWER VENT)	DEMO = LINE TO BE REMOVED DURING DEMOLITION
—	FUEL GAS (NATURAL GAS)	DN = DOWN
—		(E) = EXISTING
—		FCO = FLOOR CLEAN OUT
—		G = FUEL GAS (NATURAL GAS)
—		G.C. = GENERAL CONTRACTOR
—		HW = DOMESTIC HOT WATER
—		(N) = NEW PIPING
—		P.F. = PLUMBING FIXTURE TAG SEE PLUMBING FIXTURE SCHEDULE
—		V. = VENT (SANITARY SEWER)
—		VTR = SEWER VENT THRU ROOF
—		W. = WASTE (SANITARY SEWER)
—		WCO = WALL CLEAN OUT

Plumbing Floor Plan

SCALE: 1/8" = 1'-0"



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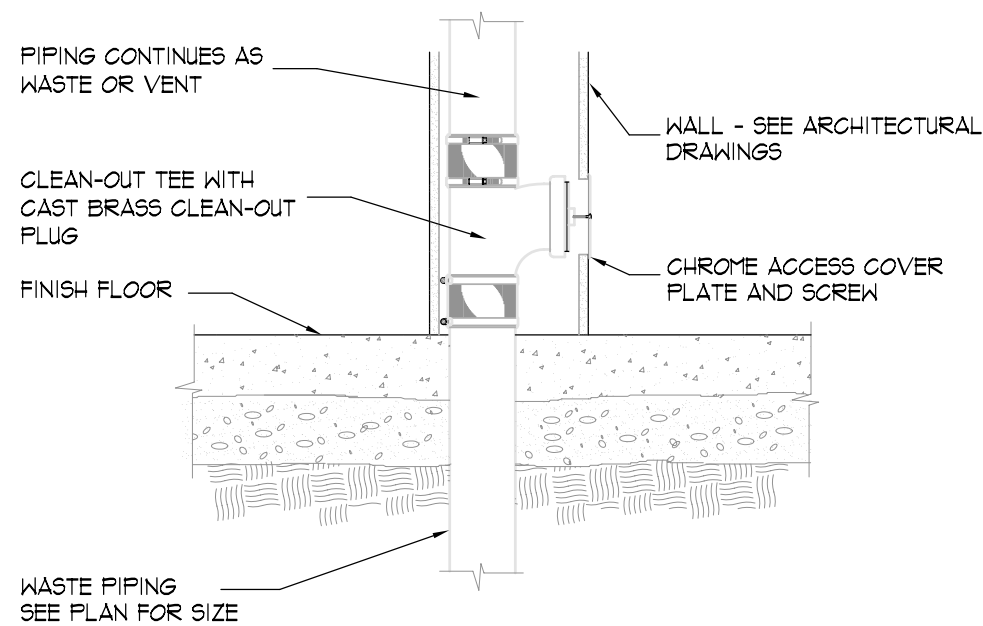
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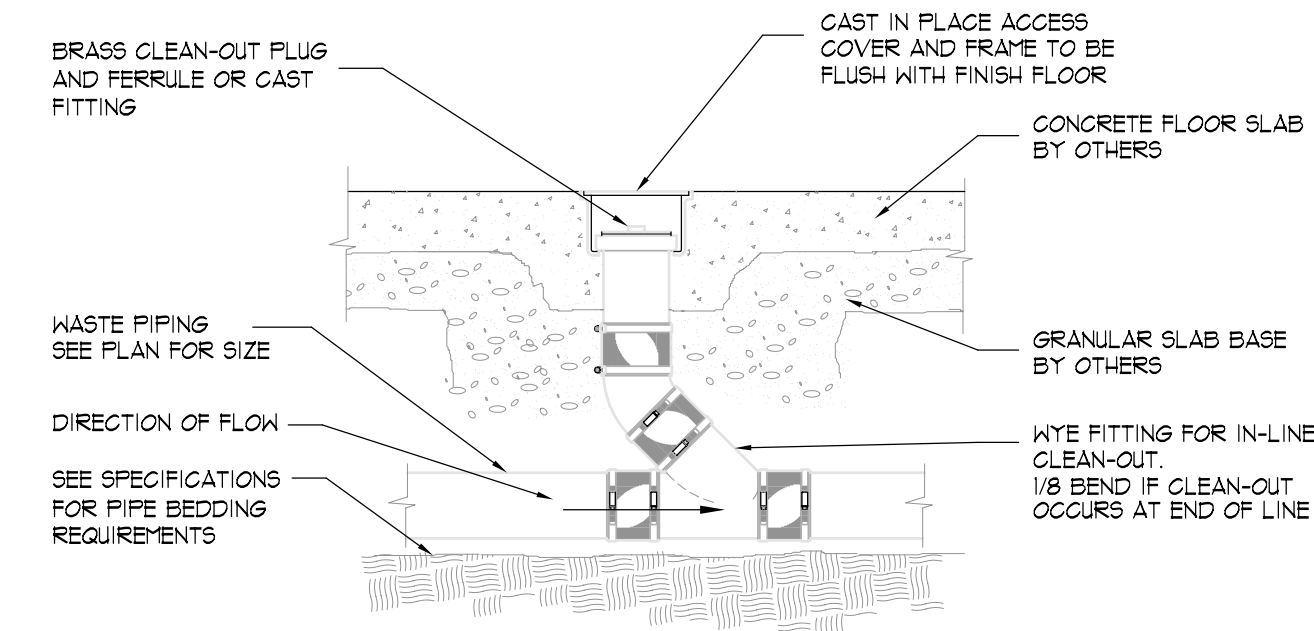
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Plumbing
Floor Plan

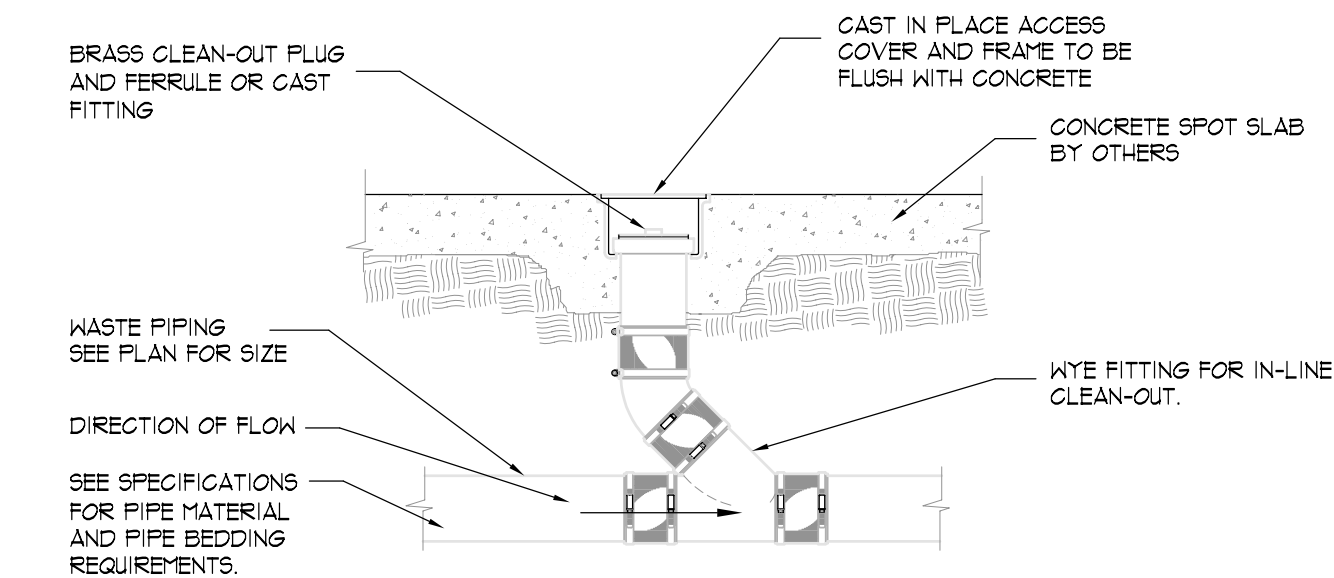
P-101



1
P-201
Wall Clean Out Detail
NO SCALE



2
P-201
Floor Clean Out Detail
NO SCALE

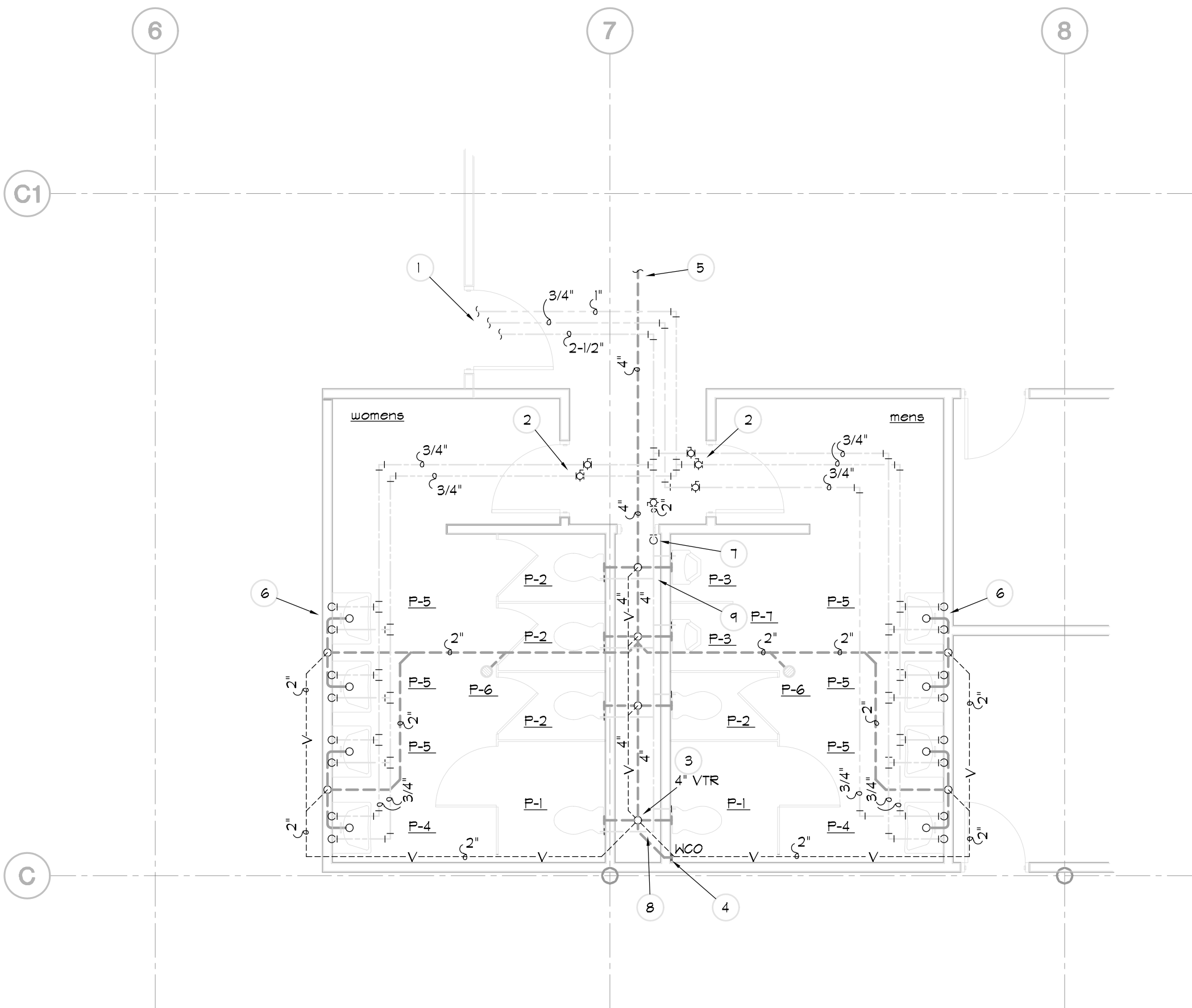


3
P-201
Clean Out to Grade Detail
NO SCALE

Plumbing Fixture Schedule							
SYMBOL	FIXTURE	MANUFACTURER MODEL	WASTE	VENT	COLD	HOT	DESCRIPTION / ACCESSORIES
P-1	ADA WATER CLOSET	SEE SPECIFICATION	4"	2"	1"	-	FLOOR MOUNT, BACK OUTLET FLUSH VALVE, SPLIT SEAT.
P-2	WATER CLOSET	SEE SPECIFICATION	4"	2"	1"	-	FLOOR MOUNT, BACK OUTLET FLUSH VALVE, SPLIT SEAT.
P-3	URINAL C/W FLUSH VALVE	SEE SPECIFICATION	2"	2"	3/4"	-	WALL MOUNTED, FLUSH VALVE
P-4	ADA WALL HUNG LAVATORY	SEE SPECIFICATION	1-1/2"	1-1/2"	1/2"	1/2"	OPEN GRID DRAIN, CAST BRASS P-TRAP W/ GUARD, WHITE COLOR, ADA FAUCET
P-5	WALL HUNG LAVATORY	SEE SPECIFICATION	1-1/2"	1-1/2"	1/2"	1/2"	OPEN GRID DRAIN, CAST BRASS P-TRAP, WHITE COLOR, FAUCET
P-6	FLOOR DRAIN	SEE SPECIFICATION	2"	1-1/2"	--	--	ADJ. MEDIUM DUTY ROUND GRATE DEEP SEAL P-TRAP
P-7	TRAP PRIMER	SEE SPECIFICATION	--	--	1/2"	--	EXTEND TO FLOOR DRAINS

Branch Water Line Schedule							
SYMBOL	FIXTURE UNITS	QUANTITY OF FIXTURES SERVED BY:					
		1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
WATER CLOSET (FLUSH VALVE)	10	---	---	1	3	5	15
WATER CLOSET (TANK TYPE)	3	1	2	4	10	---	---
URINAL (FLUSH VALVE)	5	---	1	2	6	10	---
LAVATORY OR HAND SINK	2	1	3	6	15	---	---
SERVICE SINK	4	1	3	6	---	---	---
QUANTITY OF FIXTURE UNITS SERVED BY:		3	6	12	30	50	150

NOTE:
WHERE PIPE SIZING SHOWN ON THE DRAWINGS SHALL BE FOLLOWED. OTHERWISE, PROVIDE SIZING ACCORDING TO SCHEDULE. WHERE FIXTURES ON A BRANCH ARE MIXED, USE THE SUM OF THE FIXTURE UNITS TO DETERMINE SIZING. THE BRANCHES SHALL BE REDUCED AS LOAD IS REDUCED. THE MINIMUM SIZE TO ANY ONE (1) FIXTURE SHALL BE 1/2".

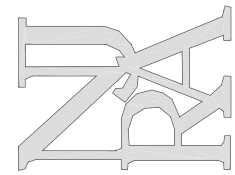


Plumbing Floor Plan

SCALE: 1/4" = 1'-0"

Keyed Reference Notes

- 1 DOMESTIC COLD WATER, DOMESTIC HOT WATER AND HOT WATER RECIRCULATION PIPING EXTENDED FROM EXISTING REST ROOM GROUP. SEE SHEET P-101 FOR CONTINUATION.
- 2 PROVIDE FULL PORT BALL VALVES FOR SERVICE / MAINTENANCE FOR EACH REST ROOM IN ACCESSIBLE CEILING CAVITY AS INDICATED.
- 3 PROVIDE 4" VENT UP THROUGH ROOF TO ATMOSPHERE. LOCATE VENT 10'-0" (MIN) AWAY FROM OUTSIDE AIR INTAKES TO BUILDING. COORDINATE WITH STRUCTURE.
- 4 PROVIDE WALL CLEAN-OUT FOR SANITARY SEWER SERVICE.
- 5 EXTEND AND CONNECT NEW 4" SANITARY SEWER TO EXISTING SEWER LATERAL. FIELD VERIFY EXACT LOCATION AND INVERT ELEVATION. SEE SHEET P-101 FOR CONTINUATION.
- 6 DROP 1/2" DOMESTIC COLD WATER AND 1/2" DOMESTIC HOT WATER TO SERVE EACH LAVATORY.
- 7 DROP 2" DOMESTIC COLD WATER DOWN IN PLUMBING CHASE TO SERVE URINALS AND WATER CLOSETS.
- 8 PROVIDE WATER HAMMER ARRESTOR AT END OF COLD WATER LINE IN PLUMBING CHASE.
- 9 PROVIDE AND INSTALL FLOOR DRAIN TRAP PRIMER IN ACCESSIBLE LOCATION IN CHASE. EXTEND PRIMER FEED LINES TO FLOOR DRAINS AS PER CODE.



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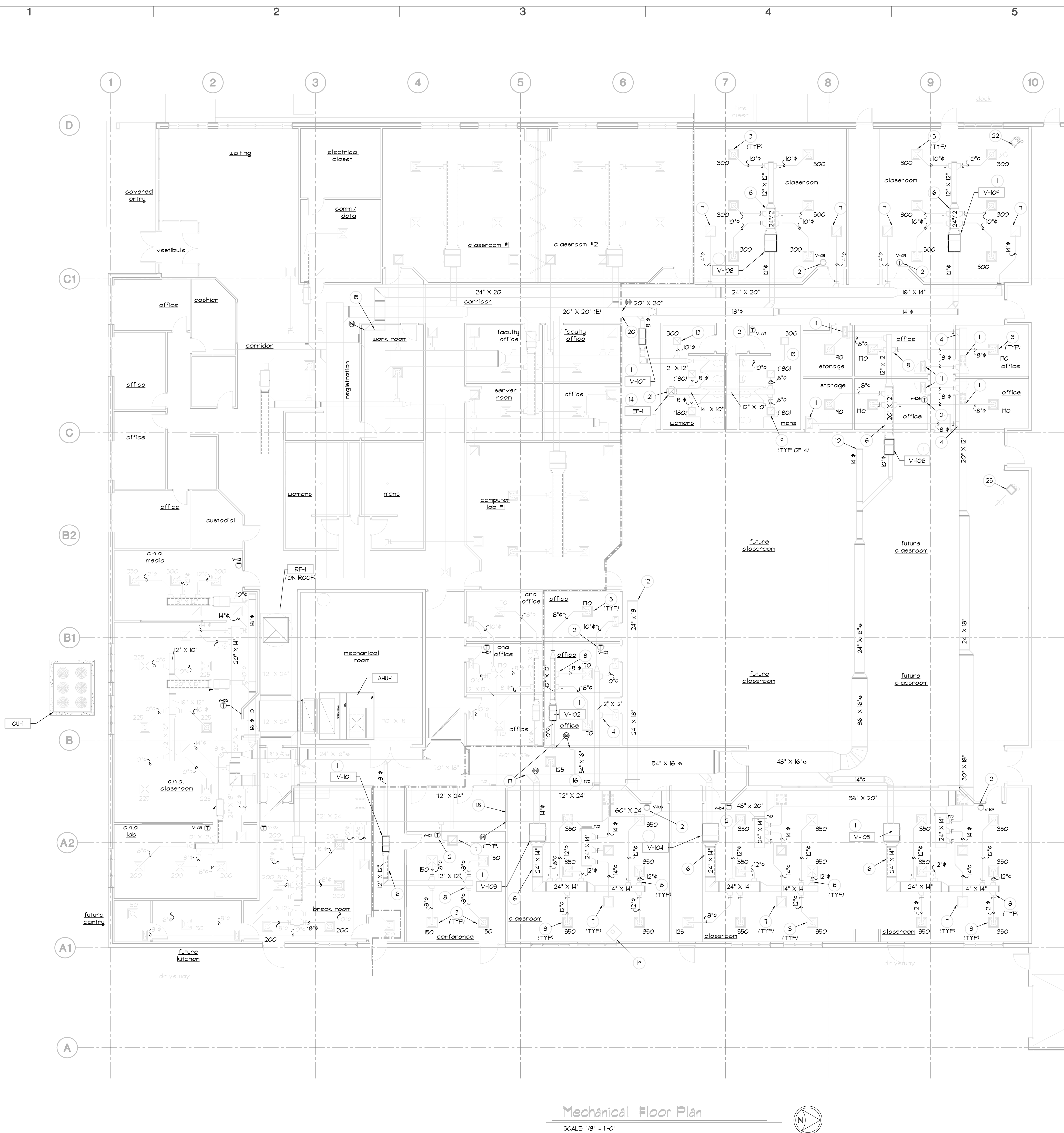
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**Plumbing
Schedules and
Details**

P-201



Mechanical Floor Plan

SCALE: 1/8" = 1'-0"

Keyed Reference Notes

1. PROVIDE AND INSTALL NEW VAV TERMINAL UNIT WITH HOT WATER HEATING COIL. INSTALL UNIT IN ACCESSIBLE CEILING CAVITY. FIELD VERIFY EXACT LOCATION. EXTEND AND CONNECT HEATING WATER BRANCH LINES AS SHOWN ON SHEET M-201. SEE EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
2. DDC ROOM SENSOR FOR VAV TERMINAL UNIT CONTROL. INSTALL ON HALL IN THIS LOCATION AT APPROX. 54" A.F.F. (TYPICAL).
3. PROVIDE SUPPLY AIR DIFFUSER IN 4-WAY BLOW ROUND NECK, STEP LOUVER TYPE, STANDARD WHITE FINISH. NECK SIZE EQUALS BRANCH DUCT SIZE. BALANCE TO CFM SHOWN. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION.
4. EXTEND 10" DIA. RETURN AIR DUCT FROM CEILING MOUNTED GRILLE TO RETURN AIR DUCT MAIN. PROVIDE HIGH EFFICIENCY DUCT CONNECTION AND MANUAL BALANCING DAMPER, TYPICAL.
5. COORDINATE DUCT ROUTING AND LOCATION WITH STRUCTURE, LIGHTING AND OTHER BUILDING SERVICES. FIELD VERIFY EXACT LOCATION.
6. PROVIDE 96" (MIN) ACOUSTICALLY LINED SUPPLY AIR DUCT DOWNSTREAM FROM VAV TERMINAL UNITS. FINISH ALL EXPOSED LINER ENDS TO PREVENT LINER EROSION.
7. 24" X 24" (NOI) EGG-GRATE STYLE RETURN AIR GRILLE IN LAY-IN CEILING. PROVIDE DUCT CONNECTION FLEXIBLE GRILLE. EXTEND 14" DIA. RETURN AIR DUCT TO MAIN AND PROVIDE HIGH EFFICIENCY TAKE-OFF, STANDARD WHITE FINISH. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION.
8. PROVIDE HIGH EFFICIENCY TYPE BRANCH DUCT TAKE-OFF WITH MANUAL BALANCING DAMPER AT ALL BRANCH DUCT CONNECTIONS.
9. 12" X 12" (NOI) EGG-GRATE STYLE EXHAUST AIR GRILLE IN GYP. BD. CEILING. STANDARD WHITE FINISH. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION. BALANCE TO CFM SHOWN.
10. CAP MEDIUM PRESSURE SUPPLY AIR MAIN DUCT FOR FUTURE EXTENSION AND CONNECTION. FIELD VERIFY EXACT ROUTING.
11. 24" X 12" (NOI) EGG-GRATE STYLE RETURN AIR GRILLE IN LAY-IN CEILING. STANDARD WHITE FINISH. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION.
12. CAP RETURN AIR MAIN DUCT FOR FUTURE EXTENSION AND CONNECTION. FIELD VERIFY EXACT ROUTING.
13. PROVIDE SUPPLY AIR DIFFUSER IN GYP. BD. CEILING, 4-WAY BLOW, 12" X 12" NECK, STEP LOUVER TYPE, STANDARD WHITE FINISH. BALANCE TO CFM SHOWN. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION.
14. PROVIDE AND INSTALL CURB MOUNTED REST ROOM EXHAUST FAN ON ROOF ABOVE. COORDINATE WITH STRUCTURE FAN TO OPERATE CONTINUOUSLY DURING OCCUPIED HOURS. SEE EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION.
15. EXTEND AND CONNECT NEW 24" X 20" RETURN AIR DUCT MAIN TO EXISTING RETURN AIR DUCT MAIN IN THIS LOCATION. ROUTE AS INDICATED. COORDINATE WITH STRUCTURE. FIELD VERIFY EXACT LOCATION.
16. EXTEND AND CONNECT NEW 54" X 16" FLAT OVAL SUPPLY AIR DUCT MAIN TO EXISTING SUPPLY AIR DUCT MAIN IN THIS LOCATION. ROUTE AS INDICATED. COORDINATE WITH STRUCTURE. FIELD VERIFY EXACT LOCATION.
17. EXTEND AND CONNECT NEW BRANCH SUPPLY AIR DUCT TO EXISTING MAIN. PROVIDE LATERAL TYPE CONNECTION AS INDICATED. SEAL DUCT CONNECTION TO 2" PRESSURE CLASS.
18. EXTEND AND CONNECT NEW 12" X 24" RETURN AIR DUCT MAIN TO EXISTING 12" X 24" RETURN AIR DUCT MAIN IN THIS LOCATION. ROUTE AS INDICATED. COORDINATE WITH STRUCTURE. FIELD VERIFY EXACT LOCATION.
19. EXISTING HEATER UNIT AND ASSOCIATED PIPING TO BE REMOVED. RETURN UNIT HEATER TO OWNER.
20. EXTEND AND CONNECT NEW 20" X 20" RECTANGULAR SUPPLY AIR DUCT MAIN TO EXISTING 20" X 20" SUPPLY AIR DUCT MAIN IN THIS LOCATION. ROUTE AS INDICATED. COORDINATE WITH STRUCTURE. FIELD VERIFY EXACT LOCATION.
21. EXTEND AND CONNECT NEW 14" X 14" EXHAUST AIR DUCT UP TO ROOF MOUNTED FAN CURB DUCT CONNECTION FLANGE.
22. EXISTING FUEL GAS FIRED UNIT HEATER TO BE RELOCATED APPROX. 10 FEET EAST. SEE KEYED NOTE #23.
23. RE-INSTALL EXISTING FUEL GAS FIRED UNIT HEATER RELOCATED FROM APPROX. 10 FEET WEST OF THIS LOCATION.

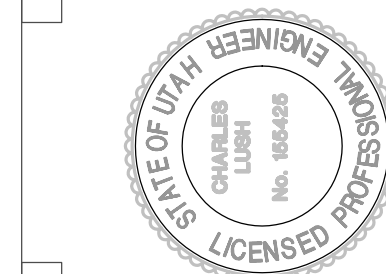
General Mechanical Notes

1. MECHANICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHER TRADES.
2. INSTALLATION SHALL BE IN CONFORMANCE WITH THE IBC, 2003 EDITION; IMC, 2003 EDITION; IFGC, 2003 EDITION; AND THE NEC, 2004 EDITION AS WELL AS LOCAL CODES AND ORDINANCES.
3. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP AND REMOVAL OF MECHANICAL DEBRIS.
4. ARRANGE AND SCHEDULE INSPECTIONS IN A TIMELY MANNER WITH THE CONSTRUCTION SCHEDULE.
5. DISCREPANCIES BETWEEN THE DRAWINGS AND EXISTING CONDITIONS SHALL BE REPORTED IN WRITING TO THE ENGINEER PRIOR TO CONTINUATION OF WORK RELATED TO SAID DISCREPANCIES.
6. UNLESS NOTED OTHERWISE, ALL PIPING SHALL BE SCHEDULE 40 BLACK STEEL AND SHALL BE OF DOMESTIC (US) MANUFACTURE. SEE SPECS.
7. ALL NEW MECHANICAL EQUIPMENT SHALL BE UL LISTED.
8. ALL MECHANICAL EQUIPMENT AND VENTING SHALL BE INSTALLED TO CONFORM WITH IBC SEISMIC REQUIREMENTS.
9. PIPING SHALL BE SUPPORTED ON MECHANICAL CHANNEL (UNISTRUT) OR BY CLEVIS HANGARS. PLUMBER'S TAPE IS NOT ACCEPTABLE.

Mechanical Symbols and Abbreviations

	SUPPLY AIR DIFFUSER	A.F.F. = ABOVE FINISH FLOOR
	RETURN AIR GRILLE	ARCH. = ARCHITECT
	RETURN AIR GRILLE	CU = CONDENSING UNIT
	RA GRILLES WITH SOUND BOOT	DN = DOWN
	EXHAUST AIR GRILLE	EA = EXHAUST AIR
	ROUND BRANCH DUCT	EF = EXHAUST FAN
	FLEXIBLE ROUND BRANCH DUCT	FD = FIRE DAMPER
	DUCT W/ 1" DUCT LINER	F/S = FIRE / SMOKE DAMPER
	SUPPLY AIR DUCT TURNED UP	FURN. = FURNACE
	SUPPLY AIR DUCT TURNED DOWN	G.C. = GENERAL CONTRACTOR
	RETURN AIR DUCT TURNED UP	GI. = GALVANIZED IRON / STEEL
	RETURN AIR DUCT TURNED DOWN	HWR = HEATING WATER RETURN
	EXH. AIR DUCT TURNED UP	HWS = HEATING WATER SUPPLY
	EXH. AIR DUCT TURNED DOWN	MAU = MAKE-UP AIR UNIT
	THERMOSTAT	OA = OUTSIDE AIR
	ELEVATION MARK	OC = ON CENTER
	POINT OF CONNECTION NEW TO EXISTING	RA = RETURN AIR
	BUTTERFLY VALVE	SA = SUPPLY AIR
	BALL VALVE	UH = UNIT HEATER
	GAUGE COCK	
	CHECK VALVE	
	AUTO 3-WAY VALVE	
	STRAINER	
	GAUGE	
	THERMOMETER	
		1/2" 90 DEG. ELBOW UP
		1/4" 90 DEG. ELBOW DOWN
		1/2" 90 DEG. TEE UP
		1/4" 90 DEG. TEE DOWN
		1/2" UNION
		1/4" CAPPED PIPE
		1/2" REDUCER / INCREASER
		1/4" GATE VALVE
		1/2" VENTURI
		1/4" FLOW SETTER

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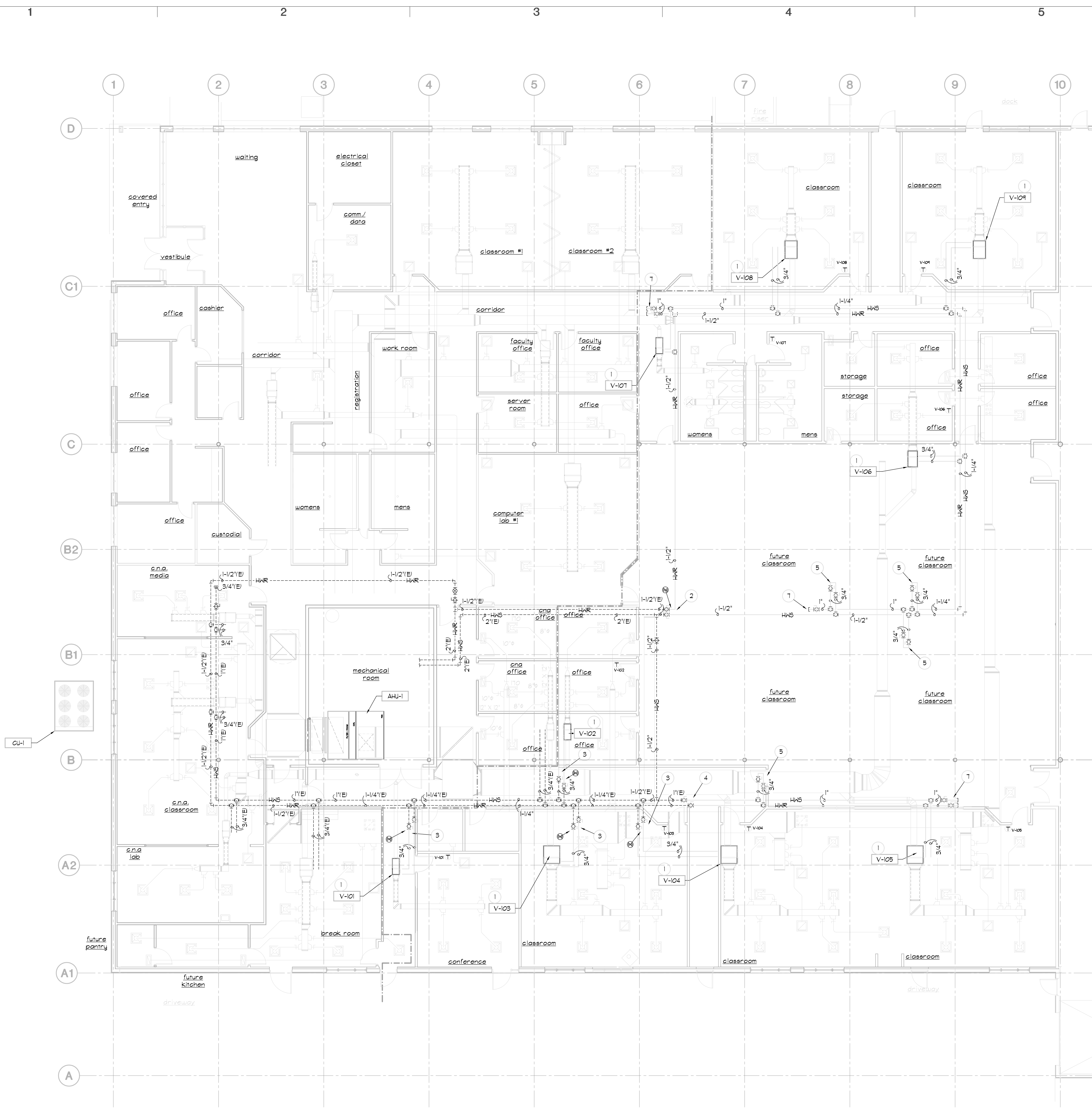
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Applied Technology College
BDO Phase III

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Mechanical
Floor Plan

M-101

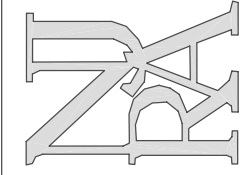


Keyed Reference Notes

- 1 NEW VAV TERMINAL UNIT WITH HOT WATER HEATING COIL TO BE INSTALLED AS PART OF NEW CONSTRUCTION. EXTEND AND CONNECT HEATING WATER BRANCH LINES AS SHOWN. SEE DETAILS AND EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION.
- 2 LOCATE EXISTING 1/2" HEATING WATER SUPPLY AND RETURN PIPING IN CEILING CAVITY. CONNECT NEW PIPING TO EXISTING AND EXTEND AS SHOWN. FIELD VERIFY EXACT LOCATION.
- 3 LOCATE EXISTING VALVED 3/4" BRANCH PIPING AND EXTEND NEW BRANCH PIPING TO NEW VAV TERMINAL UNIT FROM EXISTING.
- 4 LOCATE EXISTING 1" HEATING WATER SUPPLY AND RETURN PIPING IN CEILING CAVITY. CONNECT NEW PIPING TO EXISTING AND EXTEND AS SHOWN. FIELD VERIFY EXACT LOCATION.
- 5 PROVIDE AND INSTALL VALVED BRANCH WATER PIPING CONNECTIONS WITH 3/4" BY-PASS PIPING. VALVES ARE NORMALLY OPEN.
- 7 PROVIDE AND INSTALL LINE SIZE VALVE AND CAP IN PIPING MAIN AT THIS LOCATION FOR POSSIBLE FUTURE EXTENSION.

Mechanical Piping Plan

SCALE: 1/8" = 1'-0"



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Mechanical
Piping Plan

M-201

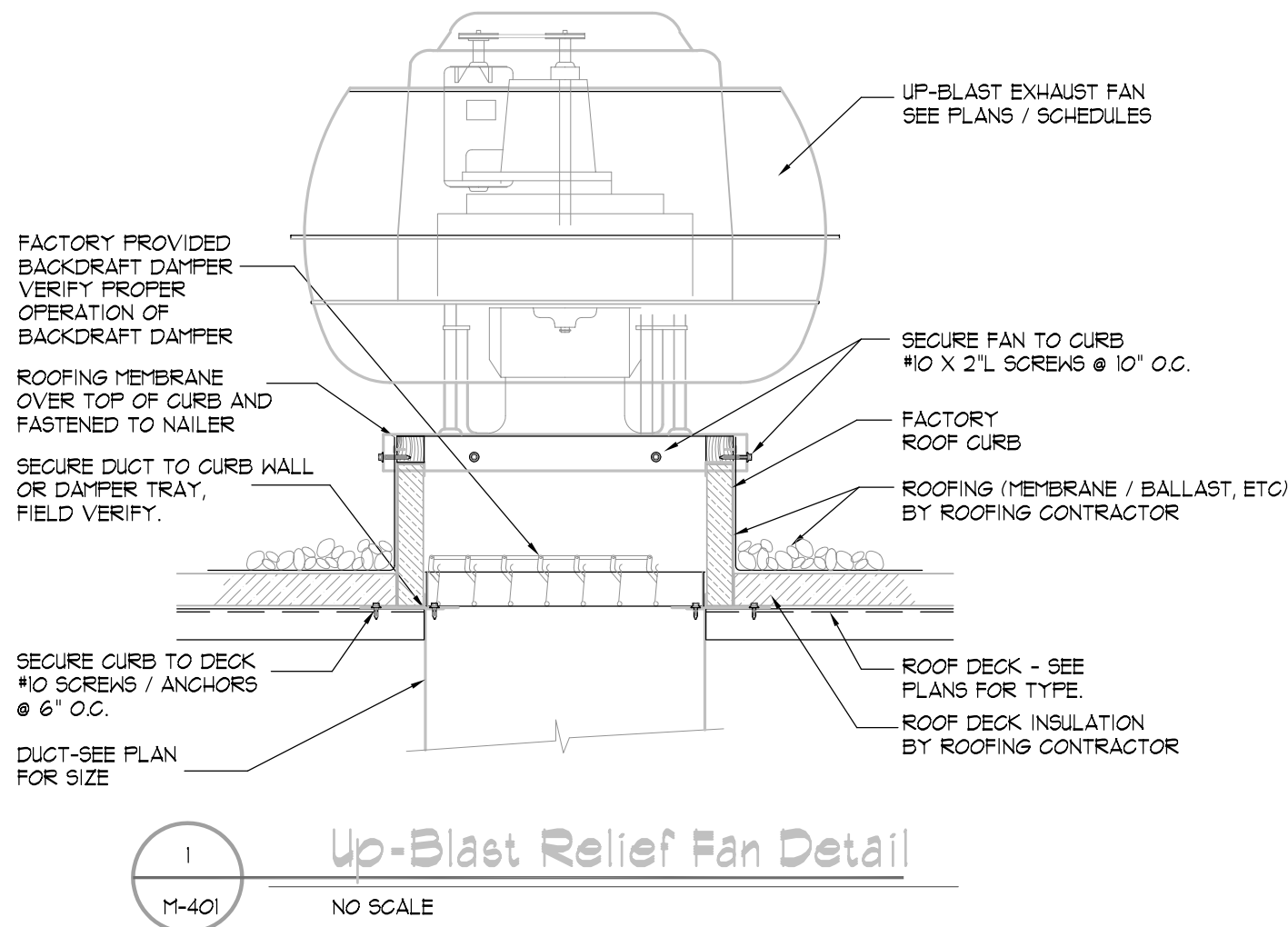
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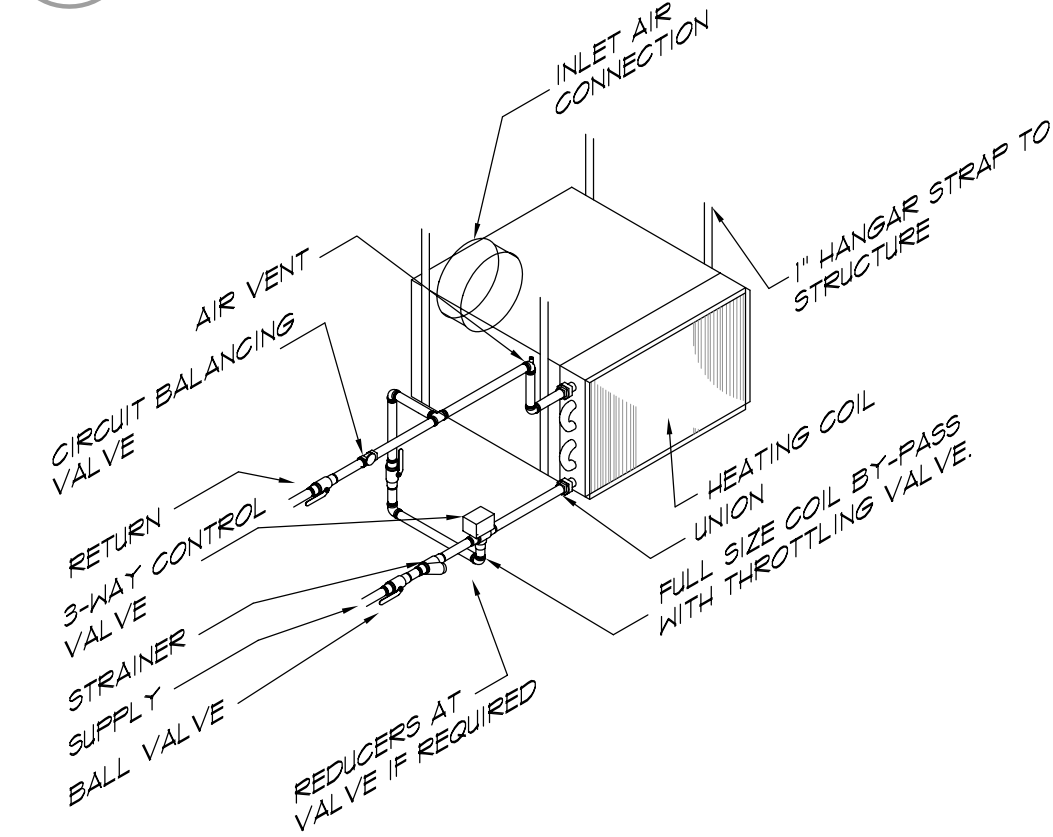
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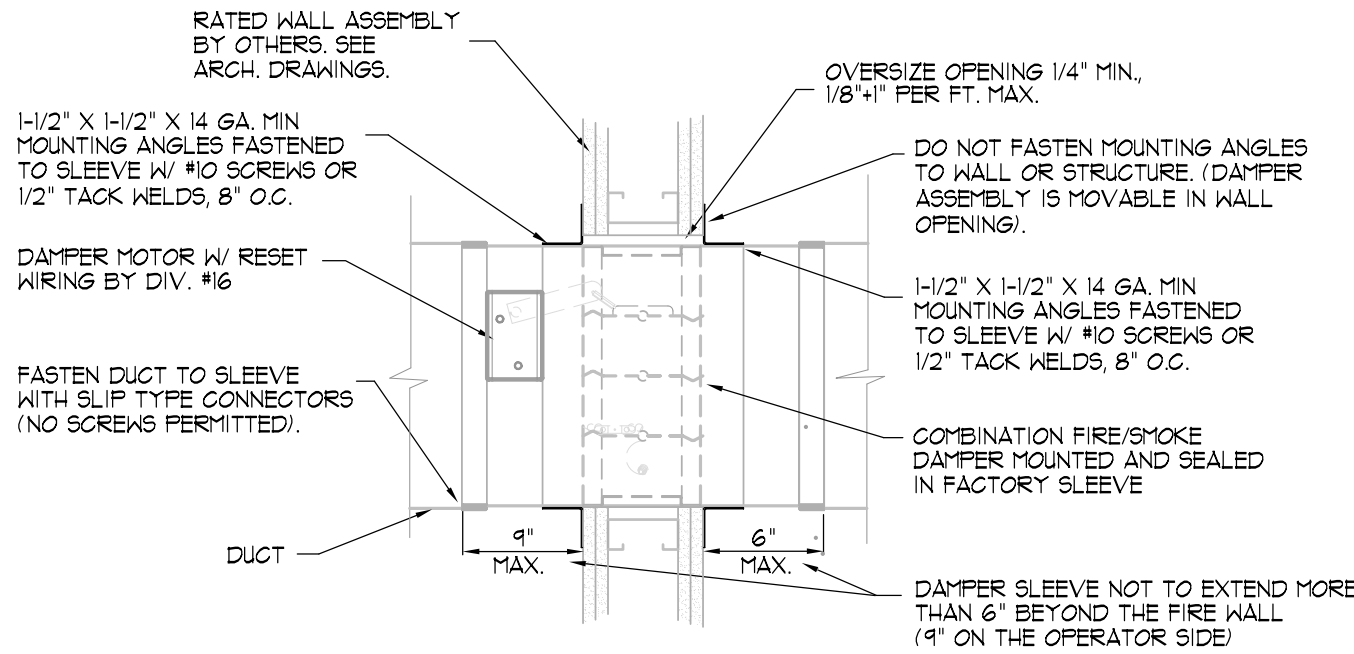
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1
M-401
Up-Blast Relief Fan Detail
NO SCALE

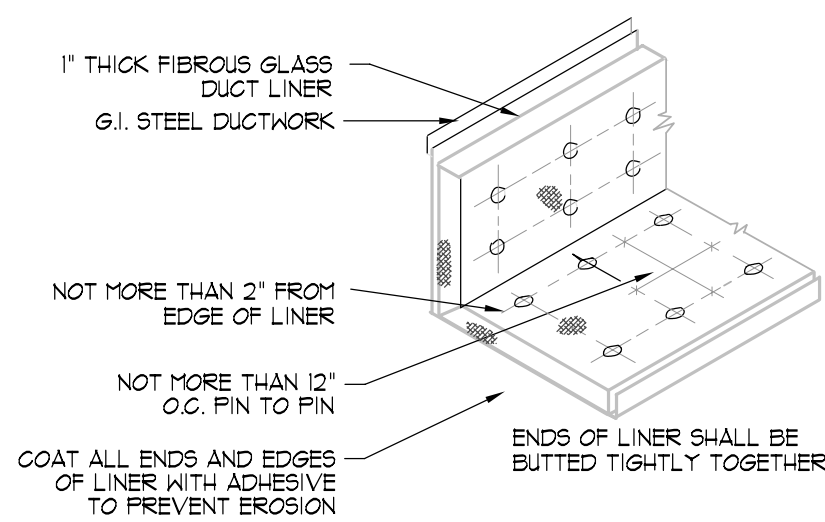


2
M-401
VAV Terminal Unit Piping
NO SCALE



NOTE:
ALL FIRE DAMPERS AND FIRE/SMOKE DAMPERS SHALL BE LISTED AND LABELED SHALL COMPLY WITH UL 555(S) AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
SMOKE DETECTION SHALL BE IN ACCORDANCE WITH NFPA 72.

3
M-401
Fire / Smoke Damper Detail
NO SCALE



4
M-401
Duct Liner Detail
NO SCALE

Rest Room Exhaust Fan Schedule

EF-1

DESCRIPTION: ROOF MOUNTED, CENTRIFUGAL REST ROOM EXHAUST FAN COMPLETE WITH: ALUMINUM HOUSING, BACKWARD INCLINED ALUMINUM FAN WHEEL, CURB CAP MOTOR, INTERNAL ISOLATORS, ROOF MOUNTING CURB, ROOF MOUNTING ACCESSORIES.

CAPACITY: 720 CFM (ADJ.) AT 0.65 IN. SP. 1041 FAN RPM, 0.14 BHP, 1/4 HP, 115 V, 1 PH, 1725 MOTOR RPM.

MANUFACTURER: PENN CO. MODEL DX-11B OR APPROVED EQUAL.

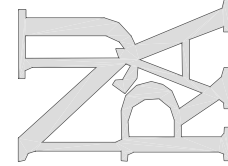
VAV TERMINAL UNIT SCHEDULE											
UNIT TAG	BASIS OF DESIGN (1) TRAFFIC CO. MODEL NO.	INLET DIA (IN)	DESIGN COIL FLOW (CFM)	MIN COIL FLOW (CFM)	PD #DESIGN (IN.WG)	UNIT HTG FLOW (CFM)			COIL HEAT (MBH)	WATER FLOW (GPM)	COIL HPD (FT)
V-101	VGNF-08	8	600	120	0.24	300			16.94	1.13	0.12
V-102	VGNF-08	8	510	110	0.22	255			15.12	1.01	0.10
V-103	VGNF-14	14	2225	445	0.36	1115			66.26	4.41	0.86
V-104	VGNF-14	14	2225	445	0.36	1115			66.26	4.41	0.86
V-105	VGNF-14	14	2225	445	0.36	1115			66.26	4.41	0.86
V-106	VGNF-10	10	860	175	0.34	450			21.58	1.42	0.18
V-107	VGNF-08	8	600	120	0.24	300			16.94	1.13	0.12
V-108	VGNF-12	12	1800	360	0.56	900			49.63	3.31	0.64
V-109	VGNF-12	12	1800	360	0.56	900			49.63	3.31	0.64

NOTES:

- SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
- COIL HEAT CAPACITIES FOR VAV UNITS ARE BASED ON ITS DEG. EXT. 55 DEG. EAT, 95 DEG. LAT, APPROX 30 DEG. MTD. ALL COILS SHALL BE HIGH CAP.
- ALL CAPACITIES SHOWN ARE BASED ON ACTUAL AIR, DERATED FOR ALTITUDE

REGISTER GRILLE AND DIFFUSER SCHEDULE					
SYMBOL	BASIS OF DESIGN *	TYPE	SIZE	PATTERN	DESCRIPTION
CD-1	NAILOR IND. 4200 RNSL-24	CEILING DIFFUSER	SEE PLAN	4-WAY	LAY-IN SUPPLY AIR DIFFUSER STANDARD WHITE FINISH
CD-2	NAILOR IND. 6500	CEILING DIFFUSER	SEE PLAN	4-WAY	SURFACE MTD. SUPPLY AIR DIFFUSER STANDARD WHITE FINISH
RG-1	NAILOR IND. SIEGS	CEILING RETURN	24" X 12"		LAY-IN EGG-GRATE TYPE GRILLE STANDARD MILL FINISH
RG-2	NAILOR IND. SIEGS	CEILING RETURN	24" X 24"		LAY-IN EGG-GRATE TYPE GRILLE STANDARD MILL FINISH
CAG-1	NAILOR IND. SIEGS	COMBUST. AIR	12" X 12"		SURFACE MTD. TYPE GRILLE STANDARD MILL FINISH

* APPROVED MANUFACTURERS: TITUS CO.; KRUEGER CO.; NAILOR CO.



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Mechanical
Schedules and
Details

M-301

MECHANICAL EQUIPMENT SCHEDULE												
NAME OF MECHANICAL EQUIPMENT		EXHAUST FAN										
MOTOR DATA	EQUIPMENT NO.	EF-1	--	--	--	--	--	--	--	--	--	--
	RATING/WATTS	1/4 HP	--	--	--	--	--	--	--	--	--	--
	VOLTAGE	120	--	--	--	--	--	--	--	--	--	--
	PHASE	5.0	--	--	--	--	--	--	--	--	--	--
	AMPS	--	--	--	--	--	--	--	--	--	--	--
	WIRE SIZE	2 #12	--	--	--	--	--	--	--	--	--	--
	GROUND WIRE	1 #12	--	--	--	--	--	--	--	--	--	--
	CONDUIT SIZE	3/4"	--	--	--	--	--	--	--	--	--	--
	FUSE DISC. SK.	--	--	--	--	--	--	--	--	--	--	--
	TYPE RKI FUSES	--	--	--	--	--	--	--	--	--	--	--
	NON-FUSE SK.	--	--	--	--	--	--	--	--	--	--	--
	CAPACITOR (KVAR)	--	--	--	--	--	--	--	--	--	--	--
NOTES:		1	--	--	--	--	--	--	--	--	--	--
I. PROVIDE A THERMAL OVERLOAD SWITCH												

LIGHTING FIXTURE SCHEDULE				
SYMBOL	DESCRIPTION	LAMPS	APPROVED MANUFACTURERS/CATALOG NUMBER	
(T-1)	2' X 4' LAY-IN GRID MOUNTED FIXTURE, FLUSH STEEL DOOR, PRISMATIC ACRYLIC LENS	(3) F32 T8 SF35	COLUMBIA ST824-332G-PSA2(25-9EB8271) METALLUX 26G8-332-A025-21TV-EB81 LIGHTOLIER XT26V(3327103) DAYBRITE 2DPG332-F521-211-V9-EB LSI 2T-G-A025-332-5D-560-211	
(T-1E)	SAFE AS T-1, BUT WITH 100 LUMEN, 90 MINUTE EMERGENCY BATTERY PACK	(3) F32 T8 SF35	COLUMBIA ST824-332G-PSA2(25-9EB8271)-BATTERY METALLUX 26G8-332-A025-21TV-EB81 LIGHTOLIER XT26V(3327103) DAYBRITE 2DPG332-F521-211-V9-EB LSI 2T-G-A025-332-5D-560-211	
(T-2)	2' X 4' LAY-IN GRID MOUNTED FLUORESCENT FIXTURE, PARABOLIC LENS	(3) F32 T8 SF35	COLUMBIA P4024-332G-HA36-5-EB8271 METALLUX 2EP36AX-332-5361-21TV-EB81 LIGHTOLIER DPS268LP33203 DAYBRITE 2DPG332-F521-211-V9-EB LSI N2P-G-8-332-FD-560-211	
(T-2E)	SAFE AS T-2, BUT WITH 100 LUMEN, 90 MINUTE EMERGENCY BATTERY PACK	(3) F32 T8 SF35	COLUMBIA P4024-332G-HA36-5-EB8271-BATTERY METALLUX 2EP36AX-332-5361-21TV-EB81 LIGHTOLIER DPS268LP33203 DAYBRITE 2DPG332-F521-211-V9-EB LSI N2P-G-8-332-FD-560-211	
(T-3)	6" APERTURE, RECESSED FLUORESCENT DOWNLIGHT, TRIPLE TUBE VERTICAL LAMP, CLEAR ALZAK REFLECTOR	(1) 324 PLT	PRESCOLITE CFT632EB-STF602-F50FA PORTPOLIO G6352-E-6001-L1 LIGHTOLIER B32J-ACLP-6152BU CARRI CRV242-6-T042SL KRATZER KL6-53PLT-CFF-211	
(T-4)	6" X 48" SURFACE MOUNTED FIXTURE, WITH W/EPAROUND ACRYLIC LENS	(2) F32 T8 SF35	COLUMBIA H24-232-EB8271-GLR METALLUX (EQUAL) LIGHTOLIER (EQUAL) DAYBRITE (EQUAL) LSI (EQUAL)	
(T-5)	WALL MOUNTED VANITY LIGHT FIXTURE, FLUORESCENT	(2) F32 T8 SF35	COLUMBIA HAL-K-H0552-EB8271-GLR METALLUX (EQUAL) LIGHTOLIER (EQUAL) DAYBRITE (EQUAL) LSI (EQUAL)	
(T-5)	FLUORESCENT STRIP LIGHT WITH WIREGUARD	(2) F32 T8 SF35	COLUMBIA CS4-232-EB4LHUNV-CSH454 METALLUX (EQUAL) LIGHTOLIER (EQUAL) DAYBRITE (EQUAL) LSI (EQUAL)	
(EX-1)	SINGLE FACE, LED EXIT SIGN, POLYCARBONATE HOUSING, WHITE WITH GREEN LETTERS, BATTERY BACK-UP	INCLUDED	PRESCOLITE XT-3-G-EN-H SURELITES LPK10GWH LIGHTOLIER L1UNGH MCCHILDEN CXL36H BRANDHURST TP-HH-GN-EP-HH-HJ	
(EX-2)	SAFE AS EX-1, BUT TO BE TWO FACED	INCLUDED	PRESCOLITE XT-3-G-EN-HH SURELITES LPK10GWH LIGHTOLIER L1UNGH MCCHILDEN CXL36H BRANDHURST TP-HH-GN-EP-HH-HJ	
(EX-3)	SURFACE MOUNTED EMERGENCY BUG-LIGHT TYPE FIXTURE	INCLUDED	PRESCOLITE B1AX SURELITES C1J-2 LIGHTOLIER EBL2L6H MCCHILDEN C16 BRANDHURST EL-HH-EL1-DCT5	

- NOTES:
1. ALL FLUORESCENT LIGHTS SHALL HAVE ELECTRONIC BALLASTS, 10% TOTAL HARMONIC DISTORTION. MOTOROLA AND MAGNATEK ARE APPROVED MANUFACTURERS. BALLASTS TO HAVE 5 YEAR WARRANTY.
2. ALL FLUORESCENT LAMPS SHALL HAVE COLOR TEMPERATURE TO MATCH EXISTING.
3. FIELD VERIFY ALL LIGHTING VOLTAGES PRIOR PLACING ANY ORDER.
4. THE WRITTEN CRITERIA OF THE FIXTURE DESCRIPTION TAKES PRECEDENCE OVER THE CATALOG NUMBER.

POWER SYSTEMS SYMBOL LIST	
SYMBOL	DESCRIPTION
	DUPLEX CONVENIENCE OUTLET - 20 AMP
	DUPLEX CONVENIENCE OUTLET - 20 AMP GROUND FAULT INTERRUPTER
	4-PLEX CONVENIENCE OUTLET - 20 AMP
	4-PLEX CONVENIENCE OUTLET - 20 AMP GROUND FAULT INTERRUPTER
	SPECIAL PURPOSE SINGLE PHASE OUTLET
	FLUSH FLOOR OUTLET BOX
	FLUSH FLOOR POKE THROUGH OUTLET
	JUNCTION BOX - SIZE AND FUNCTION AS REQUIRED
	CONDUITS CONCEALED IN FLOOR OR BELOW GRADE
	CONDUITS CONCEALED IN CEILING AND WALLS
	ARROWS INDICATE HOME RUNS
	NON FUSED DISCONNECT SWITCH - SIZE AS REQUIRED
	FUSED DISCONNECT SWITCH - SIZE AS REQUIRED
	COMBINATION STARTER/FUSED DISCONNECT SWITCH - SIZE AS REQUIRED
	MOTOR LOCATION
	MANUAL DISCONNECT WITH THERMAL OVERLOAD PROTECTION
	ELECTRICAL PANEL LOCATION
	INDICATES WEATHER PROOF EQUIPMENT
	INDICATES DEVICE IS ABOVE COUNTER TOP
	INDICATES CEILING MOUNTED DEVICE
	MECHANICAL EQUIPMENT CALLOUT
	REFERENCE NOTE CALLOUT

LIGHTING SYSTEMS SYMBOL LIST	
SYMBOL	DESCRIPTION
	RECESSED FLUORESCENT FIXTURE
	SURFACE MOUNTED FLUORESCENT FIXTURE
	FLUORESCENT STRIP LIGHT FIXTURE
	RECESSED FIXTURE
	RECESSED WALL WASHIER FIXTURE
	WALL MOUNTED FIXTURE
	SURFACE MOUNTED WALL WASHIER FIXTURE
	SURFACE MOUNTED FIXTURE
	WALL SCONCE FIXTURE
	PENDANT MOUNTED FIXTURE
	FIXTURES ON EMERGENCY POWER
	EXIT LIGHT, ARROWS SHOW EXIT DIRECTION
	WALL MOUNTED LIGHT FIXTURE
	WALL MOUNTED CAN LIGHT FIXTURE
	EMERGENCY BATTERY OPERATED LIGHT-SINGLE OR TWIN BEAM
	SINGLE POLE TOGGLE SWITCH - 20 AMP
	SINGLE POLE TOGGLE SWITCH - 20 AMP, LETTERS INDICATE SWITCH ASSIGNMENT
	THREE WAY TOGGLE SWITCH - 20 AMP
	CEILING MOUNTED OCCUPANCY SENSOR - U = ULTRASONIC, I = INFRARED, DT = DUAL TECH.
	WALL MOUNTED OCCUPANCY SENSOR - U = ULTRASONIC, I = INFRARED, DT = DUAL TECH.
	SLIDE CONTROL DIMMER
	SPRING WOUND LIGHTING TIMER SWITCH 0-60 MINUTES WITH HOLD
	LIGHTING FIXTURE CALLOUT, NUMBER INDICATES A SUGGESTED QUANTITY-- TO BE VERIFIED

FIRE ALARM SYSTEM SYMBOL LIST	
SYMBOL	DESCRIPTION
	ELECTRICAL PANEL LOCATION
	FIRE ALARM1 PHOTOELECTRIC SMOKE DETECTOR
	FIRE ALARM1 PHOTOELECTRIC DUCT DETECTOR
	FIRE ALARM1 HEAT DETECTOR
	FIRE ALARM1 FLAME DETECTOR
	FIRE ALARM1 MANUAL PULL STATION
	FIRE ALARM1 HORN WITH STROBE HIGH DECIBEL
	FIRE ALARM1 HORN HIGH DECIBEL
	A.D.A. STROBE FOR FIRE ALARM1
	FIRE ALARM1 CONTROL PANEL
	FIRE ALARM1 REMOTE ANNUNCIATOR PANEL

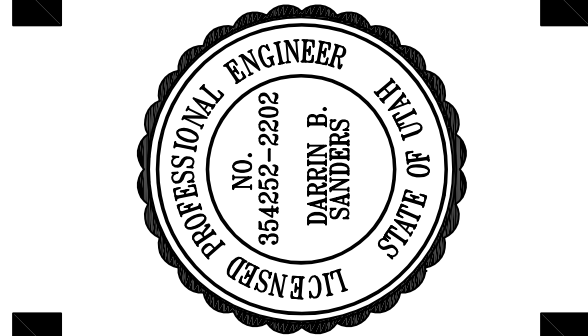
COMMUNICATION SYSTEMS SYMBOL LIST	
SYMBOL	DESCRIPTION
	TELEPHONE TERMINAL BOARD
	FLUSH TELEPHONE OUTLET
	FLUSH DATA OUTLET
	FLUSH TELE/DATA OUTLET
	CLOCK OUTLET
	SPEAKER OUTLET

GENERAL NOTES:

- ① IN THE EXISTING SPACES TO BE RENOVATED, THE CONTRACTOR SHALL REMOVE ALL LIGHT FIXTURES, SWITCHES, WIRING, CONDUIT, WIRING DEVICES, FIRE ALARM DEVICES, SPEAKERS, VOLUME CONTROLS, ETC. AS REQUIRED WHETHER OR NOT SHOWN ON THE DRAWINGS.
- ② ALL MATERIALS TO BE REMOVED AND RETURNED TO THE OWNER. MATERIALS WHICH THE OWNER DECIDES NOT TO KEEP SHALL BE SALVAGED AND REMOVED FROM THE SITE BY THE CONTRACTOR.
- ③ ALL CONCEALED CONDUIT THAT CANNOT BE REMOVED SHALL BE CUT FLUSH WITH THE FINISH SURFACES AND CAPPED OFF AFTER THE WIRING HAS BEEN DISCONNECTED AT THE PANEL AND REMOVED FROM THE CONDUIT.
- ④ IN AREAS WHERE CIRCUIT CONTINUITY IS INTERRUPTED, BUT MUST BE MAINTAINED BECAUSE OF THE NATURE OF THE FACILITY, MAKE ALL THE NECESSARY MODIFICATIONS TO THE CIRCUITS IN ORDER TO MAINTAIN THE CIRCUIT INTEGRITY.
- ⑤ THE CONTRACTOR SHALL PATCH THE WALLS AND CEILINGS WHERE THE DEVICES ARE REMOVED TO MATCH THE EXISTING WALLS AND CEILINGS.
- ⑥ THE COLOR OF ALL THE NEW DEVICES AND COVERPLATES SHALL MATCH THE COLOR OF THE EXISTING DEVICES AND COVERPLATES.
- ⑦ REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATION OF ALL LIGHTING FIXTURES.
- ⑧ THE COLOR OF THE LIGHT FIXTURES SHALL BE SELECTED BY THE ARCHITECT.
- ⑨ MINIMUM SIZE OF CONDUIT TO BE 3/4". ALUMINUM CONDUITS SHALL NOT BE USED.
- ⑩ USE RIGID STEEL SET SCREEN TYPE FITTINGS ONLY. DIE CAST FITTINGS SHALL NOT BE USED.
- ⑪ SUPPORT THE LAY-IN TYPE FIXTURES FROM THE CEILING DECK INDEPENDENT OF THE CEILING GRID, AS SHOWN ON THE TYPICAL RECESSED FIXTURE MOUNTING DETAIL.
- ⑫ REFER TO THE MECHANICAL SHEETS FOR THE EXACT LOCATION OF THE MECHANICAL EQUIPMENT.
- ⑬ ALL NEW WORK MUST MEET THE CURRENT ADOPTED NATIONAL ELECTRICAL CODE.
- ⑭ NOT MORE THAN THREE (3) CIRCUITS SHALL BE INSTALLED IN A CONDUIT. EACH CIRCUIT SHALL CONSIST OF 1 CONDUCTOR FOR EACH PHASE, 1 NEUTRAL, AND 1 GROUND, FOR A TOTAL OF FIVE CONDUCTORS.
- ⑮ THE SIZE OF THE NEUTRAL CONDUCTORS SHALL BE NO. 10 AWG FOR ALL HOME RUNS WITH COMMON NEUTRAL (LIGHTING AND POWER CIRCUITS).
- ⑯ THE MINIMUM SIZE OF THE CONDUCTORS ARE TO BE #12 AWG THIN COPPER, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- ⑰ ALL PANELBOARDS SHALL HAVE FULL SIZE ISOLATED NEUTRAL AND GROUND COPPER BUSBARS.
- ⑱ DETAILS ARE SHOWN ON DIFFERENT SHEETS. THE CONTRACTOR SHALL REFER TO THOSE DETAILS WHETHER OR NOT CALLED IN REFERENCE NOTES.
- ⑲ ALL J-BOXES SHALL HAVE MINIMUM DEPTH OF 2-1/8" UNLESS OTHERWISE SPECIFIED. SECURE ALL J-BOXES AS SHOWN IN THE DETAILS. FURNISH AND INSTALL PROPER MUD RINGS.
- ⑳ ALL CONDUITS EXPOSED TO THE WEATHER SHALL BE GALVANIZED RIGID STEEL, UNLESS OTHERWISE NOTED.
- ㉑ ALL NEW EXPOSED CONDUIT MUST RUN AGAINST THE WALLS OR CEILINGS. DO NOT PENDANT MOUNT ANY CONDUIT FROM THE CEILINGS.
- ㉒ ALL THE HOMERUNS MUST BE ACCESSIBLE IN THE CEILING PLenum. DO NOT CARRY A HOMERUN FROM ONE DEVICE TO ANOTHER WHICH IS TIED TO A SEPARATE HOMERUN INSIDE THE WALL. MARK ON ALL THE J-BOXES THE CIRCUIT NAMES AND NUMBERS. USE NO. 10 THIN CONDUCTORS FOR CONDUCTOR LENGTH OVER 100 FEET, NO. 8 THIN OVER 200 FEET, NO. 6 THIN OVER 300 FEET AND NO. 4 THIN OVER 400 FEET LENGTH.
- ㉓ PAINT ALL THE J-BOXES FOR FIRE ALARM SYSTEM WITH RED PAINT. MARK ALL THE CONDUIT FOR FIRE ALARM SYSTEM EVERY 6" WITH RED STRIPE.
- ㉔ COORDINATE WITH THE OWNER AND ARCHITECT FOR THE EXACT LOCATION OF THE OUTLETS.
- ㉕ LIGHT SWITCHES INSTALLED ADJACENT TO EACH OTHER, SHALL BE GANGED TOGETHER WITH ONE PIECE COVERPLATE.
- ㉖ AT THE END OF THE JOB, PROVIDE BLANK COVER PLATES TO MATCH THE OTHER COVER PLATES FOR ALL J-BOXES WHERE DEVICES HAVE NOT YET BEEN INSTALLED.
- ㉗ SEAL AROUND ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS AND CEILINGS WITH FIRE RATED MATERIAL. SM IS AN APPROVED MANUFACTURER.
- ㉘ ALL DISCONNECTS, J-BOXES AND CONDUITS EXPOSED TO THE OUTSIDE WEATHER SHALL BE NON-CORROSIVE, WEATHER PROOF TYPE.
- ㉙ ALL DISCONNECTS SHALL BE HEAVY DUTY TYPE.
- ㉚ ALL MATERIALS USED IN THIS INSTALLATION SHALL BE U.L. APPROVED AND NEW.
- ㉛ ALL WIRING MUST BE IN CONDUIT. BRANCH CIRCUIT WIRING CONCEALED IN WALLS AND CEILING SPACES MAY BE RAN IN MC CABLE. HOME-RUNS AND EXPOSED WIRING SHALL BE RAN IN CONDUIT. (ROMEX IS NOT PERMITTED).
- ㉜ FLEXIBLE CONDUITS CAN ONLY BE USED FOR SHORT RUNS (6' MAXIMUM).
- ㉝ NO CONDUITS SHALL RUN IN DUCT WORK.
- ㉞ PRIOR TO SUBMITTING A BID THE ELECTRICAL CONTRACTOR SHALL INSPECT THE SITE AND INCLUDE IN HIS BID PACKAGE ALL CHARGES DUE TO EXISTING CONDITIONS. SHOP DRAWINGS ARE REQUIRED. ALL LABOR, MATERIAL AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF 1 YEAR FROM THE DATE OF ACCEPTANCE BY THE TENANT. REPLACE OR REPAIR ALL DEFECTS DURING THE GUARANTEED PERIOD.
- ㉟ THE ELECTRICAL CONTRACTOR SHALL TERMINATE THE ELECTRICAL CONNECTIONS TO ALL THE EQUIPMENT BY PROVIDING THE NECESSARY MALE/FEMALE CONNECTOR, RECEPTACLE, PLUG, ETC.
- ㊱ ALL DUPLEX OUTLETS AND SWITCHES SHALL BE 20 AMP, 120 VOLT SPEC GRADE. HUBBELL AND PAYS & SEYMOUR AND LEVITON ARE APPROVED MANUFACTURERS.
- ㊲ THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE MECHANICAL CONTRACTOR SO THAT NO PIPING, DUCTS, OR OTHER EQUIPMENT SHALL BE INSTALLED IN ENTRY OR PASS THROUGH ELECTRICAL ROOM OR SPACES ABOVE OR BELOW ELECTRICAL PANELS.
- ㊳ ELECTRICAL CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENT, ETC.) OF EQUIPMENT FURNISHED UNDER OTHER DIVISIONS WITH APPROVED SHOP DRAWINGS. REFER TO BEGINNING ROUGH-IN.
- ㊴ THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES FOUND BETWEEN THE INTENDED FUNCTION OF EQUIPMENT AND EQUIPMENT SPECIFIED IN THE CONTRACT DOCUMENTS A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO ISSUANCE OF THE FINAL BID. FAILURE TO REPORT ANY DISCREPANCY (CATALOG NUMBERS, DISCONTINUED ITEMS, ETC.) DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING EQUIPMENT WHICH SHALL CONFORM TO AND FULFILL THE INTENT OF THE CONTRACT DOCUMENTS. NOR SHALL IT BE USED AS A CONDITION TO OBTAIN ADDITIONAL FUNDS FROM THE OWNER AFTER THE CONTRACT IS AWARDED. THE CONTRACTOR SHALL REQUEST ALL CLARIFICATIONS OF CONTRACT DOCUMENT REQUIREMENTS IN WRITING TO THE ARCHITECT/ENGINEER A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO ISSUANCE OF THE FINAL ADDENDUM.
- ㊵ PROVIDE TYPED LABEL FOR ALL DUPLEX OUTLETS AND LIGHT SWITCHES TO INDICATE WHICH CIRCUIT THEY ARE TIED TO.
- ㊶ INSTALL EXIT SIGNS ON THE WALL IF POSSIBLE.
- ㊷ CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER SHOP DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.
- ㊸ SWITCHBOARDS, PANELBOARDS, AND MOTOR CONTROL CENTERS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT. (NEC 110-16)
- ㊹ TO MINIMIZE NUMBER OF FALSE FIRE ALARM DURING CONSTRUCTION, THE CONTRACTOR SHALL CAP SMOKE DETECTORS IN AREAS ADJACENT TO WORK SITE WHILE DUST-GENERATING WORK IS PERFORMED. THESE CAPS SHALL BE REMOVED AT END OF WORKDAY. COORDINATE THE EXTENT OF DEVICE CAPPING REQUIRED WITH CAMPUS FIRE MARSHALL.
- ㊺ IF, FOR ANY REASON FIRE ALARM SYSTEM CANNOT BE RETURNED TO SERVICE AT THE END OF WORK DAY THE FIRE MARSHALL MUST BE NOTIFIED. CONTRACTOR SHALL PROVIDE FIRE WATCH AT NO ADDITIONAL COST TO THE OWNER.



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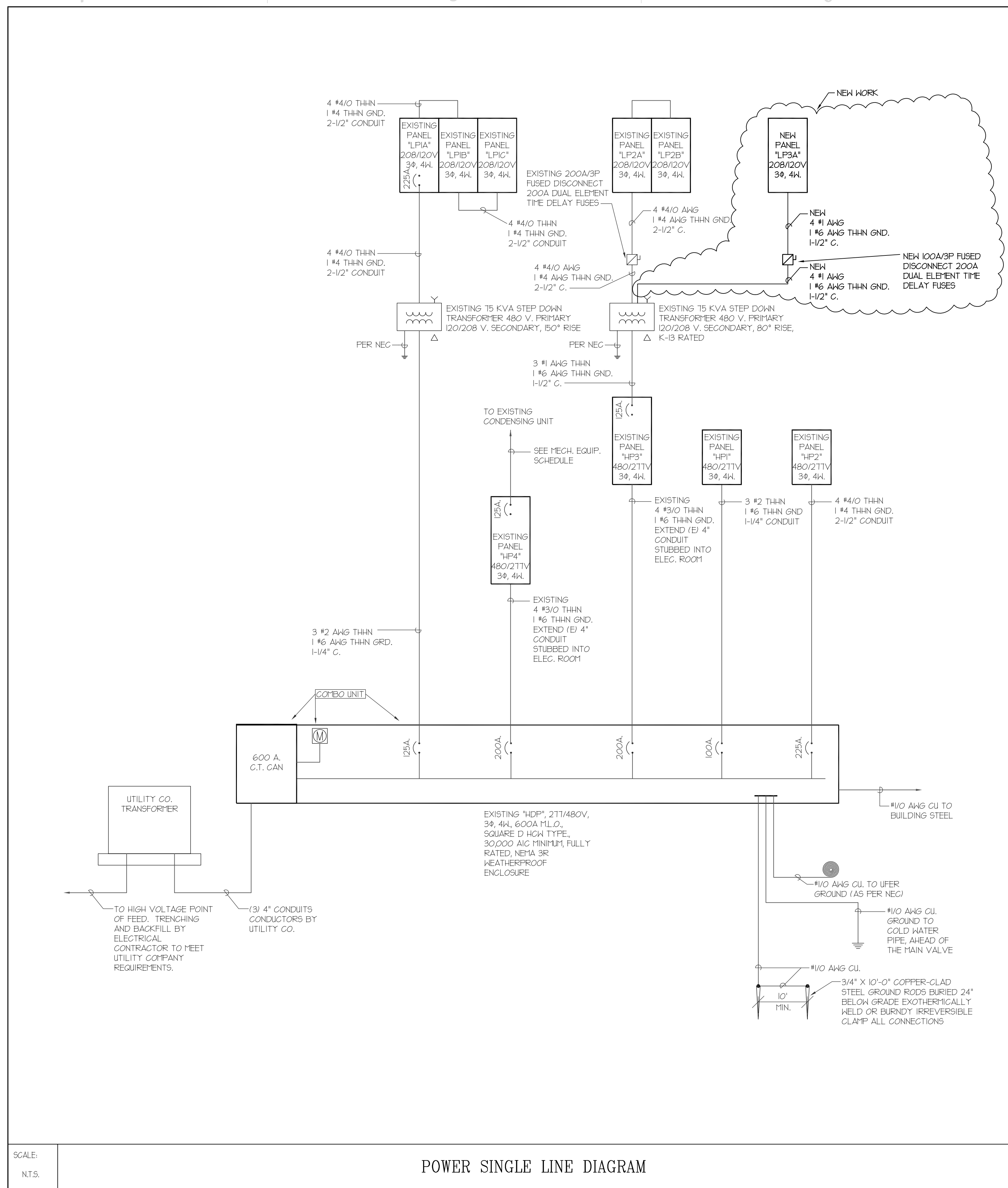
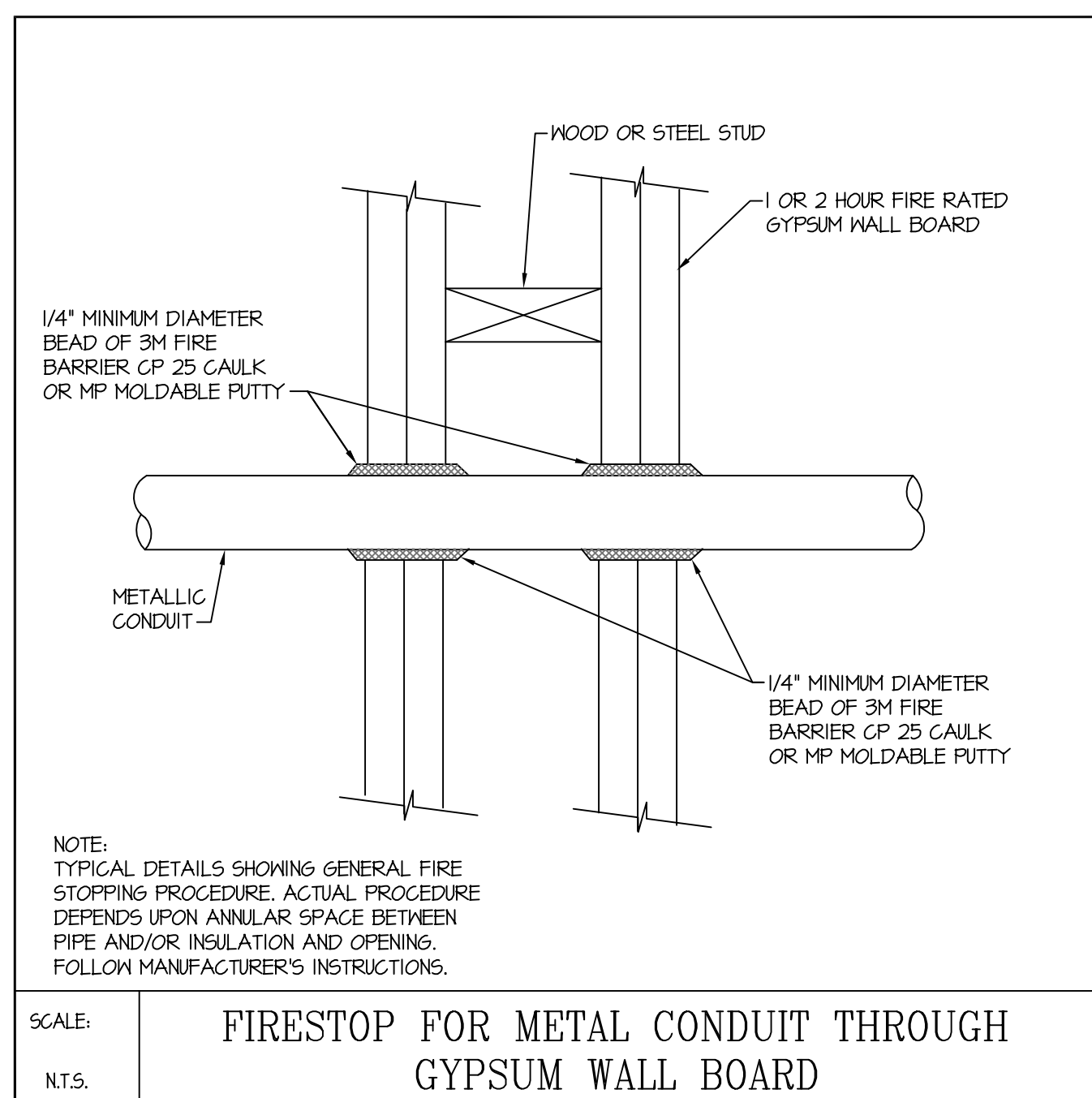
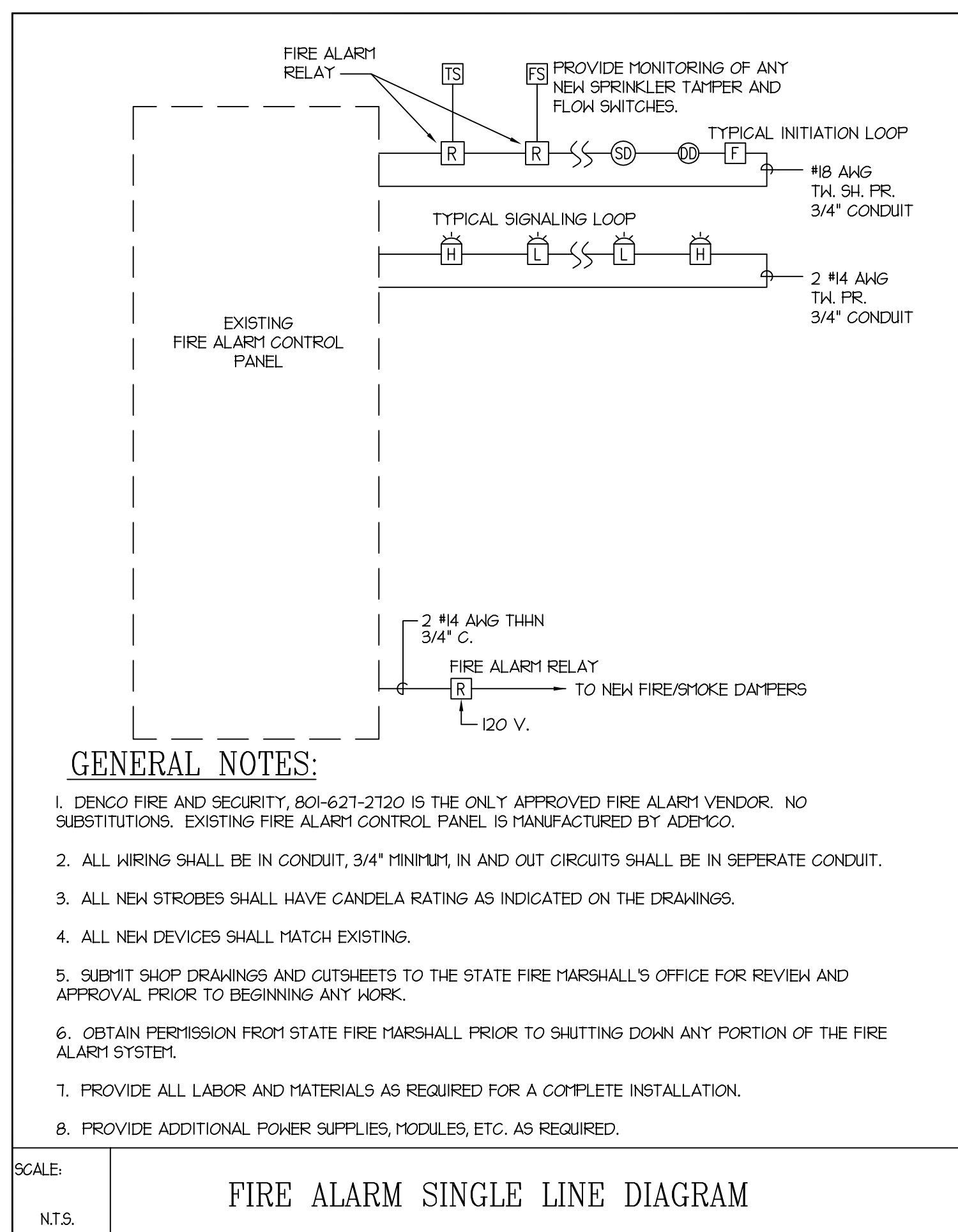
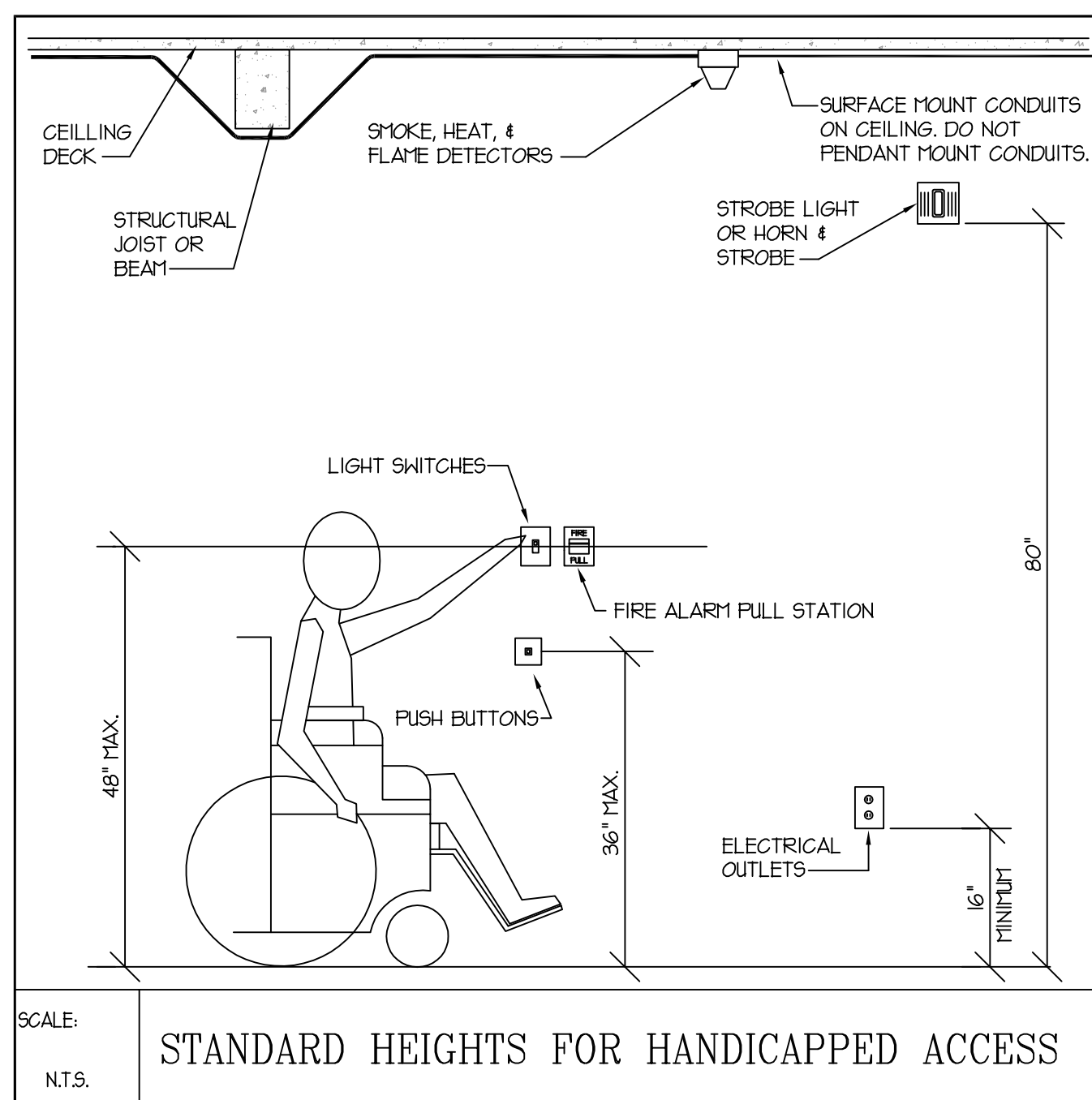
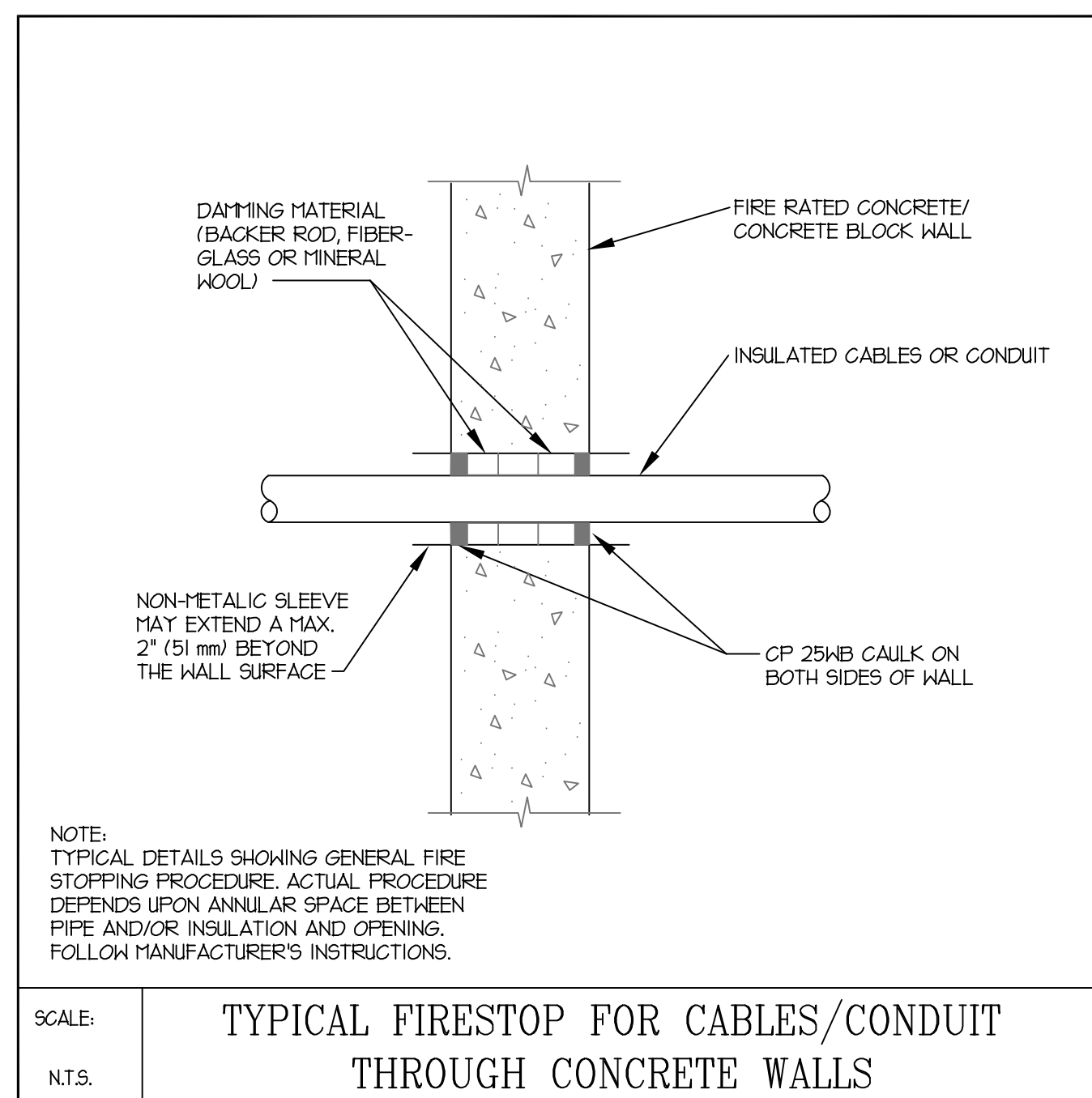
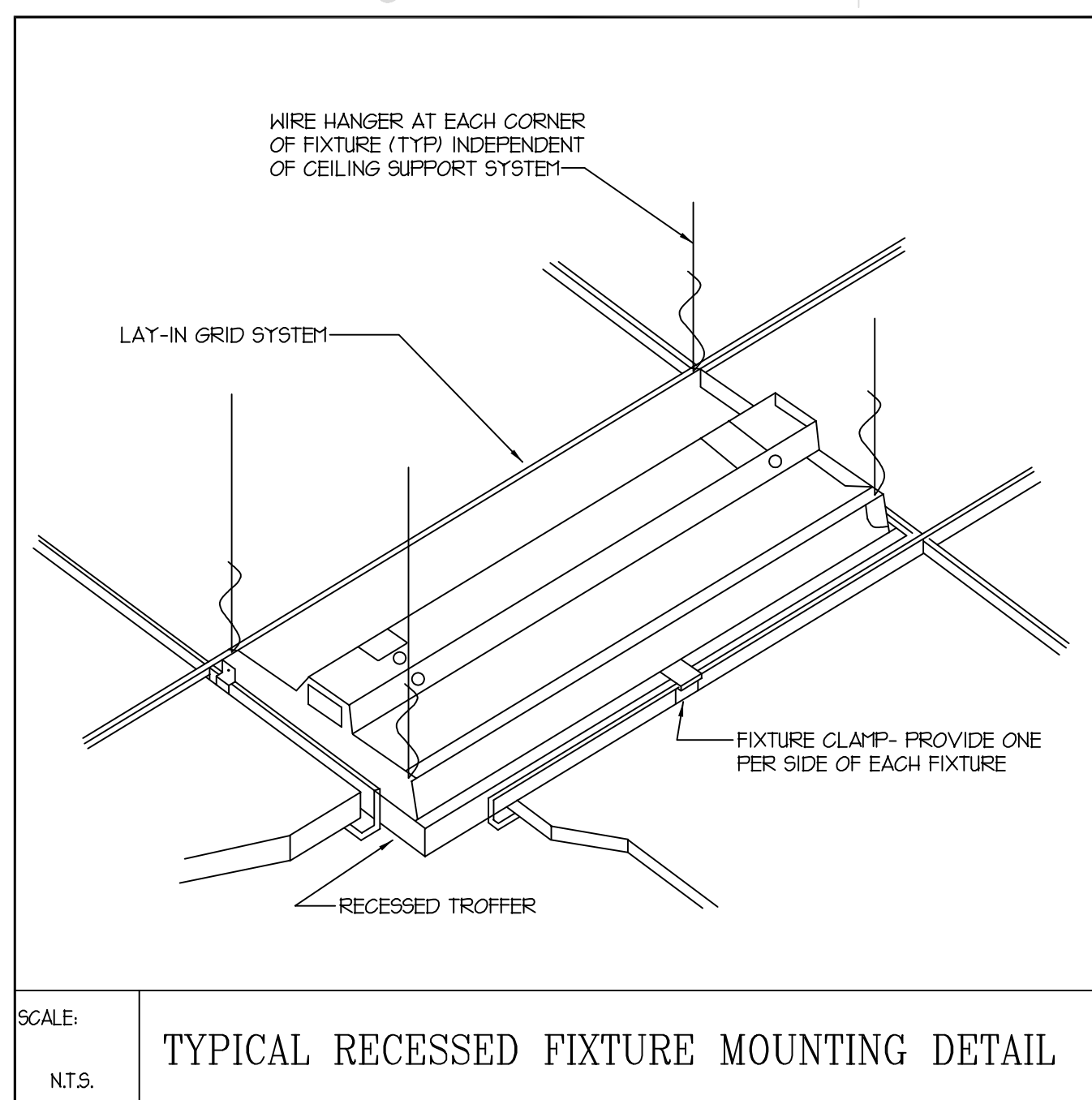
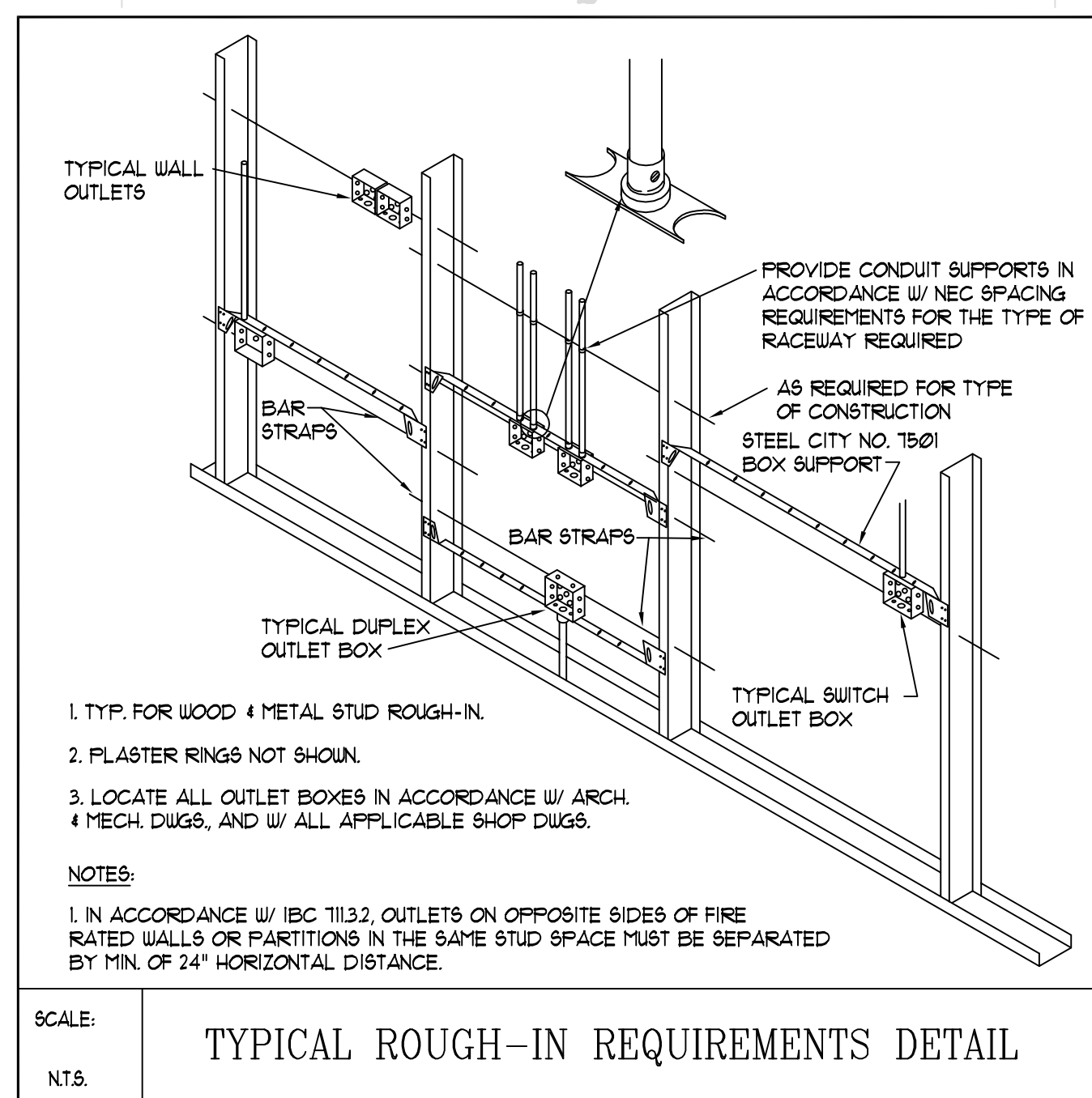
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General Notes
and Schedules

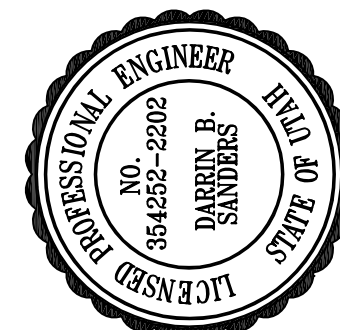
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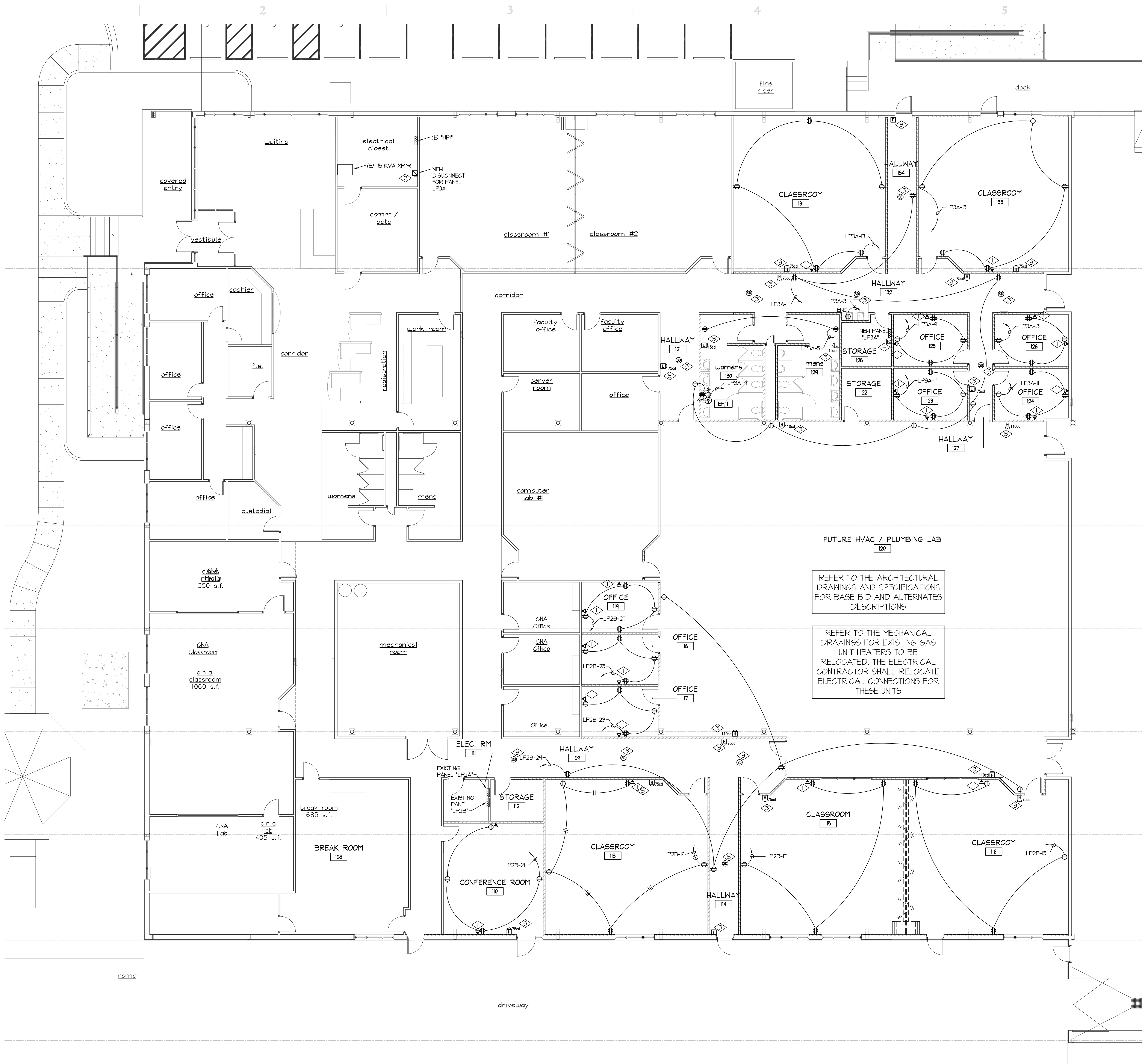
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PANEL "LP3A"														AIC RATING 10K RATING 3 / 4 SUBFED LUGS MAIN BREAKER AMPS COMMENT													
CKT	LOCATION	RECEPT	LTG	OTHER	POLE	SIZE	PHASE	SIZE	POLE	OTHER	LTG	RECEPT	LOCATION	CKT													
1	HALLWAY 121 & 131				1	20	A	20	1				SPARE	2													
3	WOMEN'S 128, MEN'S 127				1	20	B	20	1				SPARE	4													
5	HALLWAY 131 EVC				1	20	C	20	1				SPARE	6													
7	OFFICE 123				1	20	A	20	1				SPARE	8													
9	OFFICE 125				1	20	B	20	1				SPARE	10													
11	OFFICE 124				1	20	C	20	1				SPARE	12													
13	OFFICE 126				1	20	A						SPACE	14													
15	CLASSROOM 130				1	20	B						SPACE	16													
17	CLASSROOM 129				1	20	C						SPACE	18													
19	EF-1				1	20	A						SPACE	20													
21	SPARE				1	20	B						SPACE	22													
23	SPARE				1	20	C						SPACE	24													
25	SPARE				A	1	20						SPACE	26													
27	SPACE						B						SPACE	28													
29	SPACE						C						SPACE	30													
31	SPACE						A						SPACE	32													
33	SPACE						B						SPACE	34													
35	SPACE						C						SPACE	36													
37	SPACE						A						SPACE	38													
39	SPACE						B						SPACE	40													
41	SPACE						C						SPACE	42													
VA						AMPS		KVA		VA		VA		0													
0						0.0		0.0		0		0															
0						0		0		0		0															
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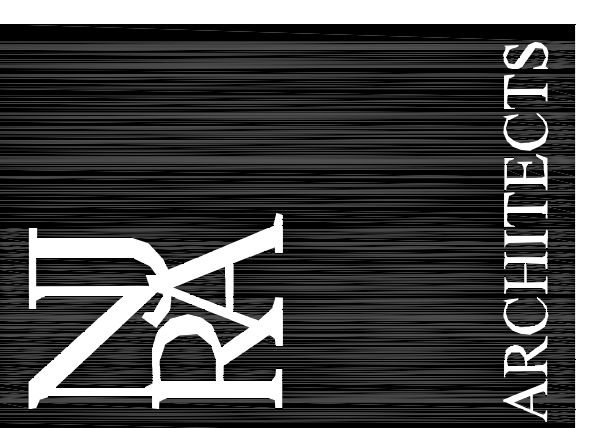
EXISTING PANEL "LP2B"														AIC RATING 10K RATING 3 / 4 SUBFED LUGS MAIN BREAKER AMPS COMMENT													
CKT	LOCATION	RECEPT	LTG	OTHER	POLE	SIZE	PHASE	SIZE	POLE	OTHER	LTG	RECEPT	LOCATION	CKT													
1	FRIDGE	1000			1	20	A						SPACE	2													
3	KITCHEN	680			1	20	B						SPACE	4													
5					1	20	C						SPACE	6													
7	RANGE	600			2	50	A						SPACE	8													
9	DISHWASHER	1000			1	20	B						SPACE	10													
11	DISPOSAL	800			1	20	C						SPACE	12													
13	KITCHEN OUTLETS	360			1	20	A						SPACE	14													
15	CLASSROOM OUTLETS*	720			1	20	B						SPACE	16													
17	CLASSROOM OUTLETS*	720			1	20	C						SPACE	18													
19	CLASSROOM OUTLETS*	900			1	20	A						SPACE	20													
21	CONF. ROOM 110 *				1	20	B						SPACE	22													
23	OFFICE 111 *				1	20	C						SPACE	24													
25	OFFICE 118 *				1	20	A						SPACE	26													
27	OFFICE 119 *				1	20	B						SPACE	28													
29	HALLWAY 116 *				1	20	C						SPACE	30													
31	SPARE				1	20	A						SPACE	32													
33	SPARE				1	20	B						SPACE	34													
35	SPARE				1	20	C						SPACE	36													
38	SPARE				A	1	20						SPACE	40													
39	SPARE						B						SPACE	42													
41	SPARE						C						SPACE	42													
VA						AMPS		KVA		VA		VA		0													
0						250.0		0.8		58.8		A 1.3			0												
0						240.0		0		20.0		B 2.4			0												
0						1520.0		0		12.7		C 1.5			0												
0						12180.0		0		33.8		TOTAL 12.2			0												
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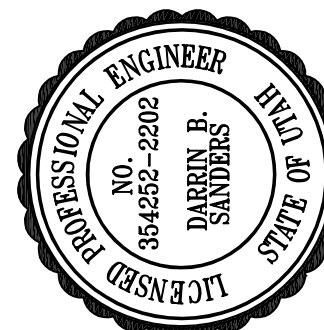
REFERENCE NOTES:

- ◆ FURNISH AND INSTALL A FLUSH J-BOX WITH A SINGLE GANG MID RING IN THE LOCATION SHOWN FOR A VOICE/DATA OUTLET. RUN (1) 1" CONDUITS FROM THE J-BOX TO THE CEILING SPACE. PROVIDE PROTECTIVE BUSHINGS ON THE CONDUITS. INSERT PULL STRINGS AND LABEL.
- ◆ FIELD VERIFY EXACT LOCATIONS OF NEW ELECTRICAL GEAR IN THE EXISTING ELECTRICAL ROOM AND MECHANICAL ROOM PRIOR TO BEGINNING ANY WORK.
- ◆ FURNISH AND INSTALL NEW FIRE ALARM DEVICES IN THE LOCATIONS SHOWN. TIE TO THE EXISTING FIRE ALARM SYSTEM IN CLASS "A" LOOPS. IN AND OUT CIRCUITS SHALL BE IN SEPARATE CONDUITS. SEE THE FIRE ALARM SINGLE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- ◆ FURNISH AND INSTALL A 7-DAY, 24-HOUR MECHANICAL TIME CLOCK TO CONTROL THE EXHAUST FAN IN THE RESTROOM. INTERMATIC, TORK, OR PARASON. ROUTE THE CIRCUIT FOR THE EXHAUST FAN THROUGH THE TIME CLOCK AND COORDINATE THE PROGRAM WITH THE OWNER.



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Floor Plan
Electrical

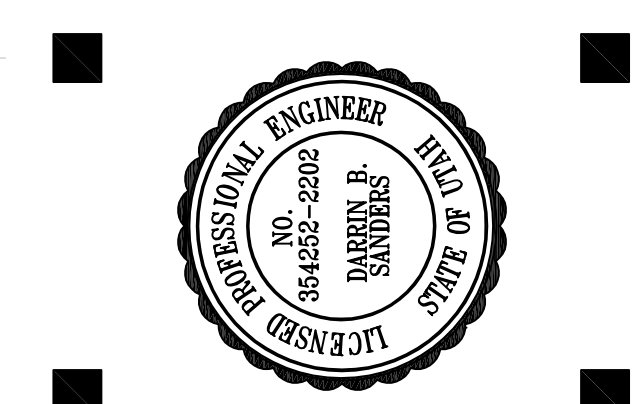
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- REFERENCE NOTES:**
- EXISTING FIXTURE TO REMAIN.
 - EXISTING SWITCHES RELOCATED FROM OLD WALLS THAT WERE REMOVED. FIELD VERIFY EXISTING LOCATIONS.
 - NEW CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR TO CONTROL LIGHTS IN AREA INDICATED. MATSTOPPER, SENSOR SWITCH, PASS 4 SETMOUR, AND HEBBELL ARE APPROVED MANUFACTURERS. COORDINATE TYPE AND LOCATION OF SENSOR WITH MANUFACTURER FOR FULL COVERAGE OF AREA.
 - NEW WALL SWITCH TYPE PIR OCCUPANCY SENSOR. MATSTOPPER, SENSOR SWITCH, PASS 4 SETMOUR, AND HEBBELL ARE APPROVED MANUFACTURERS. COORDINATE TYPE OF SENSOR WITH MANUFACTURER FOR FULL COVERAGE OF AREA.
 - TIE TO A SPARE 20AMP CIRCUIT BREAKER IN EXISTING PANEL HPI. PROVIDE CIRCUIT BREAKER IF NECESSARY.
 - RELOCATED SWITCHES THAT CONTROL LIGHTS IN OPEN BAY AREA. FIELD VERIFY EXISTING LOCATIONS.
 - RELOCATED EMERGENCY LIGHT FOR OPEN AREA. TIE TO UNSWITCHED LIGHTING CIRCUIT IN THE OPEN BAY AREA.
 - TIE THESE EXIT SIGNS TO THE UNSWITCHED LIGHTING CIRCUIT IN THE OPEN BAY AREA.



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Floor Plan
Lighting

E-901